



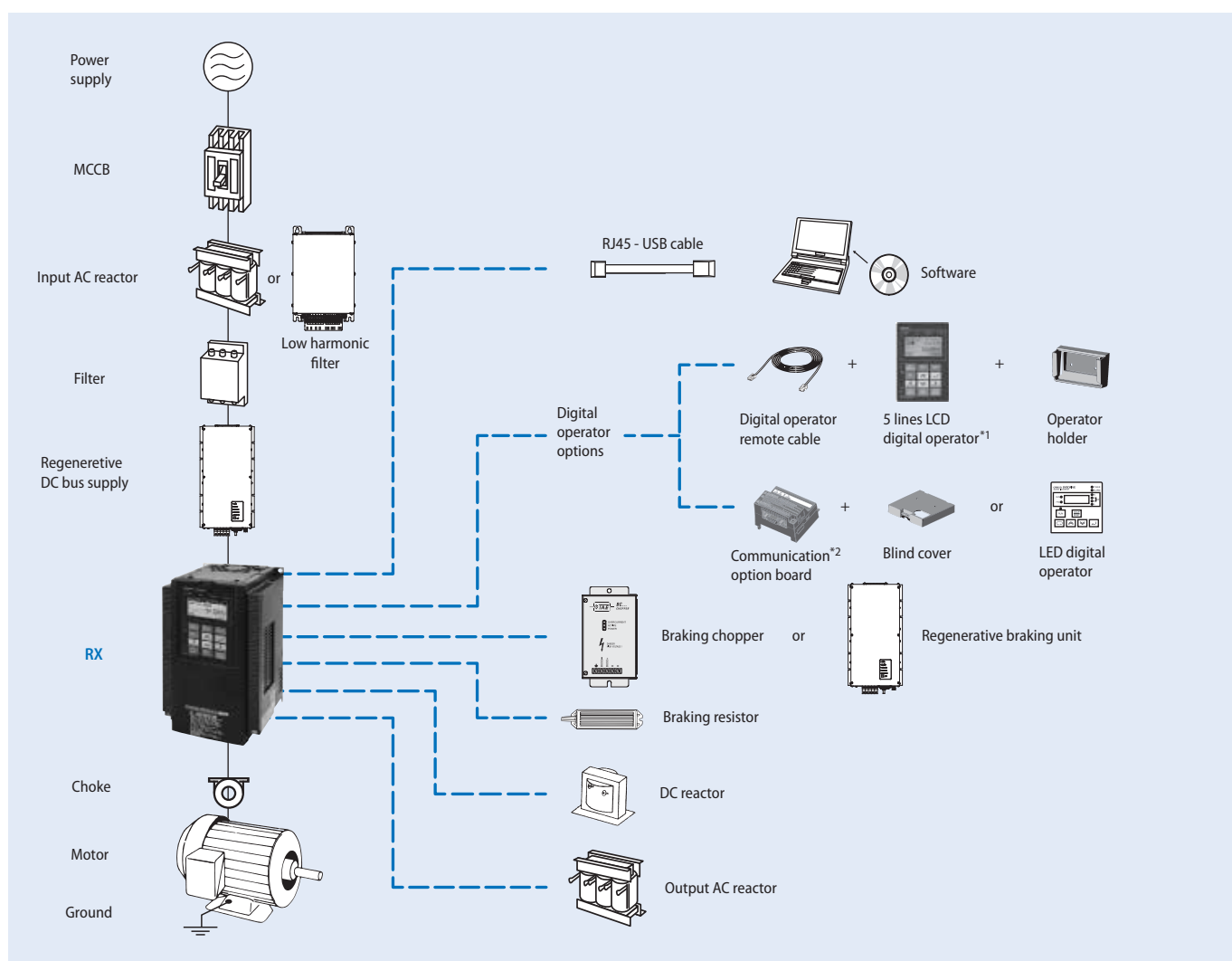
### Customised to your machine

- High starting torque in open loop: 200% at 0.3 Hz, Full torque at 0 Hz in closed loop
- Sensor-less and vector closed-loop control
- Double rating VT 120%/1 min and CT 150%/1 min
- Built-in EMC filter, logic programming and application functionality
- Positioning functionality
- Automatic energy saving
- Micro-surge voltage suppression
- Communication options: Modbus, DeviceNet, PROFIBUS, CompoNet, EtherCAT and ML2
- Regenerative solutions as option
- CE, cULus, RoHS

### Ratings

- 200 V class three-phase: 0.4 kW to 55 kW
- 400 V class three-phase: 0.4 kW to 132 kW

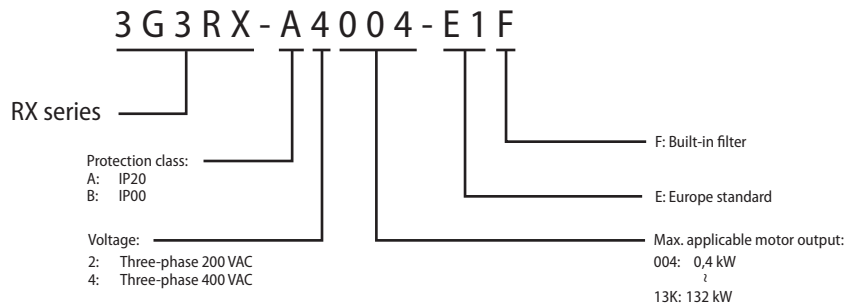
### System configuration



\*1 The 5 lines LCD digital operator is provided with the drive from factory.

\*2 When a communication option board is mounted, there are two options: mount a blind cover or a LED digital operator.

## Type designation



## Specifications

## Common specifications

| Model number: 3G3RX |                                   | Specifications                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|---------------------|-----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| General functions   | Control methods                   | Phase-to-phase sinusoidal pulse with modulation PWM (Sensorless vector control, close loop vector with motor feedback, V/f)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                     | Output frequency range            | 0.10 to 400.00 Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|                     | Frequency precision               | Digital set value: $\pm 0.01\%$ of the max. frequency<br>Analogue set value: $\pm 0.2\%$ of the max. frequency ( $25 \pm 10^\circ\text{C}$ )                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|                     | Resolution of frequency set value | Digital set value: 0.01 Hz<br>Analog input: 12 bit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|                     | Resolution of output frequency    | 0.01 Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|                     | Starting torque                   | 150%/0.3 Hz (under sensor-less vector control or sensor-less vector control at 0 Hz)<br>200%/Torque at 0 Hz (under sensor-less vector control at 0Hz, when a motor size one rank lower than specified is connected)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|                     | Overload capability               | 150%/60 s, 200%/3 s for CT; 120%/60 s VT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|                     | Frequency set value               | 0 to 10 VDC (10 K $\Omega$ ), -10 to 10 VDC (10 K $\Omega$ ), 4 to 20 mA (100 $\Omega$ ), RS485 Modbus, Network options                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|                     | V/f Characteristics               | V/f optionally changeable at base frequencies of 30 to 400 Hz, V/f braking constant torque, reduction torque, sensor-less vector control, sensor-less vector control at 0 Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|                     | Input signals                     | 8 terminals, NO/NC switchable, sink/source logic switchable<br>[Terminal function] 8 functions can be selected from among 61.<br>Reverse (RV), Multi-step speed setting binary 1 (CF1), Multi-step speed setting binary 2 (CF2), Multi-step speed setting binary 3 (CF3), Multi-step speed setting binary 4 (CF4), Jogging (JG), DC injection braking (DB), 2nd control (SET), 2-step acceleration/deceleration (2CH), Free-run stop (FRS), External trip (EXT), USP function (USP), Commercial switching (CS), Soft lock (SFT), Analog input switching (AT), 3rd control (SET3), Reset (RS), 3-wire start (STA), 3-wire stop (STP), 3-wire forward/reverse (F/R), PID enabled/disabled (PID), PID integral reset (PIDC), Control gain switching (CAS), UP/DWN function accelerated (UP), UP/DWN function decelerated (DWN), UP/DWN function data clear (UDC), Forced operator (OPE), Multi-step speed setting bit 1 (SF1), Multi-step speed setting bit 2 (SF2), Multi-step speed setting bit 3 (SF3), Multi-step speed setting bit 4 (SF4), Multi-step speed setting bit 5 (SF5), Multi-step speed setting bit 6 (SF6), Multi-step speed setting bit 7 (SF7), Overload limit switching (OLR), Torque limit enabled (TL), Torque limit switching 1 (TRQ1), Torque limit switching 2 (TRQ2), P/PI switching (PPI), Brake confirmation (BOK), Orientation (ORT), LAD cancel (LAC), Position deviation clear (PCLR), Pulse train position command input permission (STAT), Frequency addition function (ADD), Forced terminal block (F-TM), Torque reference input permission (ATR), Integrated power clear (KHC), Servo ON (SON), Preliminary excitation (FOC), Analog command on hold (AHD), Position command selection 1 (CP1), Position command selection 2 (CP2), Position command selection 3 (CP3), Zero return limit signal (ORL), Zero return startup signal (ORG), Forward driving stop (FOT), Reverse driving stop (ROT), Speed/Position switching (SPD), Pulse counter (PCNT), Pulse counter clear (PCC), No allocation (no) |
| Functionality       | Output signals                    | 5 open collector output terminals: NO/NC switchable, sink/source logic switchable<br>1 relay (SPDT contact) output terminal: NO/NC switchable<br>[Terminal function] 6 functions can be selected from among 45.<br>Signal during RUN (RUN), Constant speed arrival signal (FA1), Over set frequency arrival signal (FA2), Overload warning (OL), Excessive PID deviation (OD), Alarm signal (AL), Set-frequency-only arrival signal (FA3), Overtorque (OTQ), Signal during momentary power interruption (IP), Signal during undervoltage (UV), Torque limit (TRQ), RUN time exceeded (RNT), Power ON time exceeded (ONT), Thermal warning (THM), Brake release (BRK), Brake error (BER), 0-Hz signal (ZS), Excessive speed deviation (DSE), Position ready (POK), Set frequency exceeded 2 (FA4), Set frequency only 2 (FA5), Overload warning 2 (OL2), Analog FV disconnection detection (FVDC), Analog FI disconnection detection (FIDC), Analog FE disconnection detection (FEDC), PID FB status output (FBV), Network error (NDC), Logic operation output 1 (LOG1), Logic operation output 2 (LOG2), Logic operation output 3 (LOG3), Logic operation output 4 (LOG4), Logic operation output 5 (LOG5), Logic operation output 6 (LOG6), Capacitor life warning (WAC), Cooling fan life warning (WAF), Starting contact signal (FR), Fan overheat warning (OHF), Light load detection signal (LOC), Operation ready (IRDY), Forward run (FWR), Reverse run (RVR), Fatal fault (MJA), Window comparator FV (WCFV), Window comparator FI (WCFI), Window comparator FE (WCFE), Alarm codes 0 to 3 (ACO to AC3)                                                                                                                                                                                                                                                                                                                                                                                                                        |
|                     | Standard functions                | V/f free setting (7), Upper/lower frequency limit, Frequency jump, Curve acceleration/deceleration, Manual torque boost level/break, Energy-saving operation, Analog meter adjustment, Starting frequency, Carrier frequency adjustment, Electronic thermal function, (free setting available), External start/end (frequency/rate), Analog input selection, Trip retry, Restart during momentary power interruption, Various signal outputs, Reduced voltage startup, Overload limit, Initialization value setting, Automatic deceleration at power-off, AVR function, Automatic acceleration/deceleration, Auto tuning (Online/Offline), High torque multi-motor operation control (sensor-less vector control of two monitors with one drive)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|                     | Analogue inputs                   | Analogue inputs 0 to 10 V and -10 to 10 V (10 K $\Omega$ ), 4 to 20 mA (100 $\Omega$ )                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|                     | Analogue outputs                  | Analog voltage output, Analog current output, Pulse train output                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|                     | Accel/Decel times                 | 0.01 to 3,600.0 s (line/curve selection)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|                     | Display                           | Status indicator LED's Run, Program, Power, Alarm, Hz, Amps, Volts, %                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|                     |                                   | Digital operator: Available to monitor 23 items, output current, output frequency...                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

| Model number: 3G3RX  |                           | Specifications                                                                                                                    |
|----------------------|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| Protection functions | Motor overload protection | Electronic Thermal overload relay and PTC thermistor input                                                                        |
|                      | Instantaneous overcurrent | 200% of rated current for 3 seconds                                                                                               |
|                      | Overload                  | 150% for 1 minute                                                                                                                 |
|                      | Overvoltage               | 800 V for 400 V type and 400 V for 200 V type                                                                                     |
|                      | Momentary power loss      | Decelerates to stop with DC bus controlled, coast to stop                                                                         |
|                      | Cooling fin overheat      | Temperature monitor and error detection                                                                                           |
|                      | Stall prevention level    | Stall prevention during acceleration, deceleration and constant speed                                                             |
|                      | Ground fault              | Detection at power on                                                                                                             |
|                      | Power charge indication   | On when voltage between P and N is higher than 45V                                                                                |
| Ambient conditions   | Degree of protection      | IP20/IP00                                                                                                                         |
|                      | Ambient humidity          | 90% RH or less (without condensation)                                                                                             |
|                      | Storage temperature       | −20 to 65°C (short-term temperature during transportation)                                                                        |
|                      | Ambient temperature       | −10 to 50°C                                                                                                                       |
|                      | Installation              | Indoor (no corrosive gas, dust, etc.)                                                                                             |
|                      | Installation height       | Max. 1,000 m                                                                                                                      |
|                      | Vibration                 | 3G3RX-A_004 to A_220, 5.9 m/s <sup>2</sup> (0.6G), 10 to 55 Hz<br>3G3RX-A_300 to B_13K, 2.94 m/s <sup>2</sup> (0.3G), 10 to 55 Hz |

### 3G3RX 200 V class

| Three-phase: 3G3RX-                       |                                   |       | A2004                                              | A2007                                     | A2015 | A2022 | A2037 | A2055 | A2075 | A2110 | A2150 | A2185 | A2220 | A2300 | A2370                              | A2450 | A2550 |       |  |
|-------------------------------------------|-----------------------------------|-------|----------------------------------------------------|-------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------------------------------------|-------|-------|-------|--|
| Max. applicable motor 4P kW <sup>*1</sup> |                                   |       | at CT                                              | 0.4                                       | 0.75  | 1.5   | 2.2   | 3.7   | 5.5   | 7.5   | 11    | 15    | 18.5  | 22    | 30                                 | 37    | 45    | 55    |  |
|                                           |                                   |       | at VT                                              | 0.75                                      | 1.5   | 2.2   | 3.7   | 5.5   | 7.5   | 11    | 15    | 18.5  | 22    | 30    | 37                                 | 45    | 55    | 75    |  |
| Output characteristics                    | Drive capacity kVA                | 200 V | at CT                                              | 1.0                                       | 1.7   | 2.5   | 3.6   | 5.7   | 8.3   | 11.0  | 15.9  | 22.1  | 26.3  | 32.9  | 41.9                               | 50.2  | 63.0  | 76.2  |  |
|                                           |                                   |       | at VT                                              | 1.3                                       | 2.1   | 3.2   | 4.1   | 6.7   | 10.4  | 15.2  | 20.0  | 26.3  | 29.4  | 39.1  | 49.5                               | 59.2  | 72.7  | 93.5  |  |
|                                           |                                   | 240 V | at CT                                              | 1.2                                       | 2.0   | 3.1   | 4.3   | 6.8   | 9.9   | 13.3  | 19.1  | 26.6  | 31.5  | 39.4  | 50.2                               | 60.2  | 75.6  | 91.4  |  |
|                                           |                                   |       | at VT                                              | 1.5                                       | 2.6   | 3.9   | 5.0   | 8.1   | 12.4  | 18.2  | 24.1  | 31.5  | 35.3  | 46.9  | 59.4                               | 71.0  | 87.2  | 112.2 |  |
|                                           | Rated output current (A)          |       | at CT                                              | 3.0                                       | 5.0   | 7.5   | 10.5  | 16.5  | 24    | 32    | 46    | 64    | 76    | 95    | 121                                | 145   | 182   | 220   |  |
|                                           |                                   |       | at VT                                              | 3.7                                       | 6.3   | 9.4   | 12    | 19.6  | 30    | 44    | 58    | 73    | 85    | 113   | 140                                | 169   | 210   | 270   |  |
|                                           | Max. output voltage               |       |                                                    | Proportional to input voltage: 0 to 240 V |       |       |       |       |       |       |       |       |       |       |                                    |       |       |       |  |
|                                           | Max. output frequency             |       |                                                    | 400 Hz                                    |       |       |       |       |       |       |       |       |       |       |                                    |       |       |       |  |
| Power supply                              | Rated input voltage and frequency |       | 3-phase 200 to 240 V 50/60 Hz                      |                                           |       |       |       |       |       |       |       |       |       |       |                                    |       |       |       |  |
|                                           | Allowable voltage fluctuation     |       | −15% to 10%                                        |                                           |       |       |       |       |       |       |       |       |       |       |                                    |       |       |       |  |
|                                           | Allowable frequency fluctuation   |       | 5%                                                 |                                           |       |       |       |       |       |       |       |       |       |       |                                    |       |       |       |  |
| Power supply                              | Regenerative braking              |       | Internal BRD circuit (external discharge resistor) |                                           |       |       |       |       |       |       |       |       |       |       | External regenerative braking unit |       |       |       |  |
|                                           | Minimum connectable resistance    |       | 50                                                 | 50                                        | 35    | 35    | 35    | 16    | 10    | 10    | 7.5   | 7.5   | 5     |       |                                    |       |       |       |  |
| Degree of protection                      |                                   |       | IP20                                               |                                           |       |       |       |       |       |       |       |       |       |       |                                    |       |       |       |  |
| Cooling method                            |                                   |       | Forced air cooling                                 |                                           |       |       |       |       |       |       |       |       |       |       |                                    |       |       |       |  |

<sup>\*1</sup> Based on a standard 3-Phase motor.

### 3G3RX 400 V class

| Three-phase: 3G3RX-__         |                                   |       | A4004              | A4007                                              | A4015 | A4022 | A4040 | A4055 | A4075 | A4110 | A4150 | A4185 | A4220 | A4300 | A4370 | A4450                              | A4550 | B4750 | B4900 | B411K | B413K |       |  |
|-------------------------------|-----------------------------------|-------|--------------------|----------------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------------------------------------|-------|-------|-------|-------|-------|-------|--|
| Max. applicable motor 4P kW*1 |                                   |       | at CT              | 0.4                                                | 0.75  | 1.5   | 2.2   | 4.0   | 5.5   | 7.5   | 11    | 15    | 18.5  | 22    | 30    | 37                                 | 45    | 55    | 75    | 90    | 110   | 132   |  |
|                               |                                   |       | at VT              | 0.75                                               | 1.5   | 2.2   | 4.0   | 5.5   | 7.5   | 11    | 15    | 18.5  | 22    | 30    | 37    | 45                                 | 55    | 75    | 90    | 110   | 132   | 160   |  |
| Output characteristics        | Drive capacity kVA                | 400 V | at CT              | 1.0                                                | 1.7   | 2.5   | 3.6   | 6.2   | 9.7   | 13.1  | 17.3  | 22.1  | 26.3  | 33.2  | 40.1  | 51.9                               | 63.0  | 77.6  | 103.2 | 121.9 | 150.3 | 180.1 |  |
|                               |                                   |       | at VT              | 1.3                                                | 2.1   | 3.3   | 4.6   | 7.7   | 11.0  | 15.2  | 20.9  | 25.6  | 30.4  | 39.4  | 48.4  | 58.8                               | 72.7  | 93.5  | 110.8 | 135   | 159.3 | 200.9 |  |
|                               |                                   | 480 V | at CT              | 1.2                                                | 2.0   | 3.1   | 4.3   | 7.4   | 11.6  | 15.8  | 20.7  | 26.6  | 31.5  | 39.9  | 48.2  | 62.3                               | 75.6  | 93.1  | 123.8 | 146.3 | 180.4 | 216.1 |  |
|                               |                                   |       | at VT              | 1.5                                                | 2.5   | 4.0   | 5.5   | 9.2   | 13.3  | 18.2  | 24.1  | 30.7  | 36.5  | 47.3  | 58.1  | 70.6                               | 87.2  | 112.2 | 133   | 162.1 | 191.2 | 241.1 |  |
|                               | Rated output current (A)          | at CT | 1.5                | 2.5                                                | 3.8   | 5.3   | 9.0   | 14    | 19    | 25    | 32    | 38    | 48    | 58    | 75    | 91                                 | 112   | 149   | 176   | 217   | 260   |       |  |
|                               |                                   | at VT | 1.9                | 3.1                                                | 4.8   | 6.7   | 11.1  | 16    | 22    | 29    | 37    | 43    | 57    | 70    | 85    | 105                                | 135   | 160   | 195   | 230   | 290   |       |  |
|                               | Max. output voltage               |       |                    | Proportional to input voltage: 0 to 480 V          |       |       |       |       |       |       |       |       |       |       |       |                                    |       |       |       |       |       |       |  |
|                               | Max. output frequency             |       |                    | 400 Hz                                             |       |       |       |       |       |       |       |       |       |       |       |                                    |       |       |       |       |       |       |  |
| Power supply                  | Rated input voltage and frequency |       |                    | 3-phase 380 to 480 V 50/60 Hz                      |       |       |       |       |       |       |       |       |       |       |       |                                    |       |       |       |       |       |       |  |
|                               | Allowable voltage fluctuation     |       |                    | -15% to 10%                                        |       |       |       |       |       |       |       |       |       |       |       |                                    |       |       |       |       |       |       |  |
|                               | Allowable frequency fluctuation   |       |                    | 5%                                                 |       |       |       |       |       |       |       |       |       |       |       |                                    |       |       |       |       |       |       |  |
| Power supply                  | Regenerative braking              |       |                    | Internal BRD circuit (external discharge resistor) |       |       |       |       |       |       |       |       |       |       |       | External regenerative braking unit |       |       |       |       |       |       |  |
|                               | Minimum connectable resistance    |       |                    | 100                                                | 100   | 100   | 100   | 70    | 70    | 35    | 35    | 24    | 24    | 20    |       |                                    |       |       |       |       |       |       |  |
| Degree of protection          |                                   |       | IP20               |                                                    |       |       |       |       |       |       |       |       |       |       |       |                                    |       |       |       | IP00  |       |       |  |
| Cooling method                |                                   |       | Forced air cooling |                                                    |       |       |       |       |       |       |       |       |       |       |       |                                    |       |       |       |       |       |       |  |

<sup>\*1</sup> Based on a standard 3-Phase motor.

## Dimensions

## 3G3RX drive

Figure 1

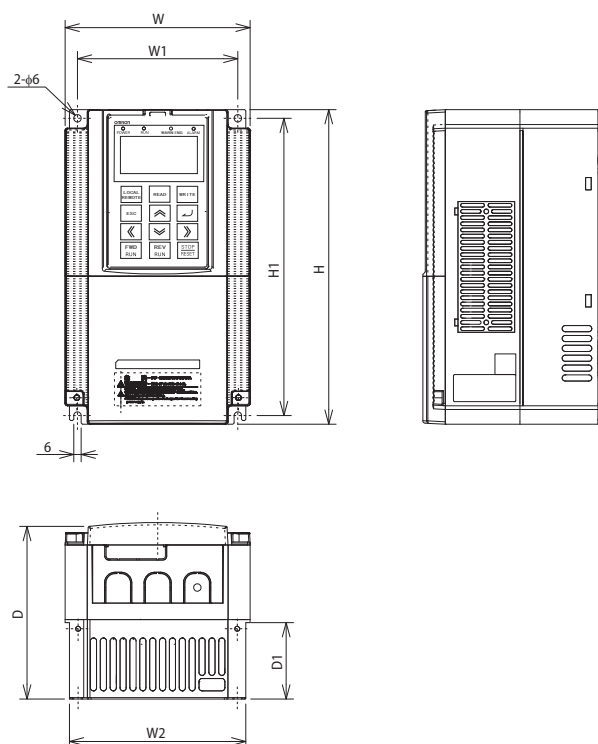


Figure 3

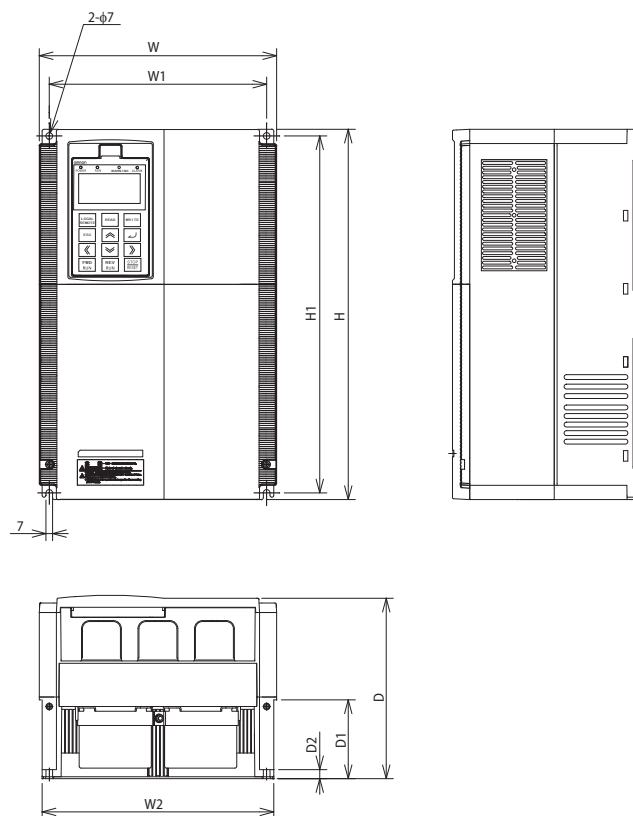


Figure 2

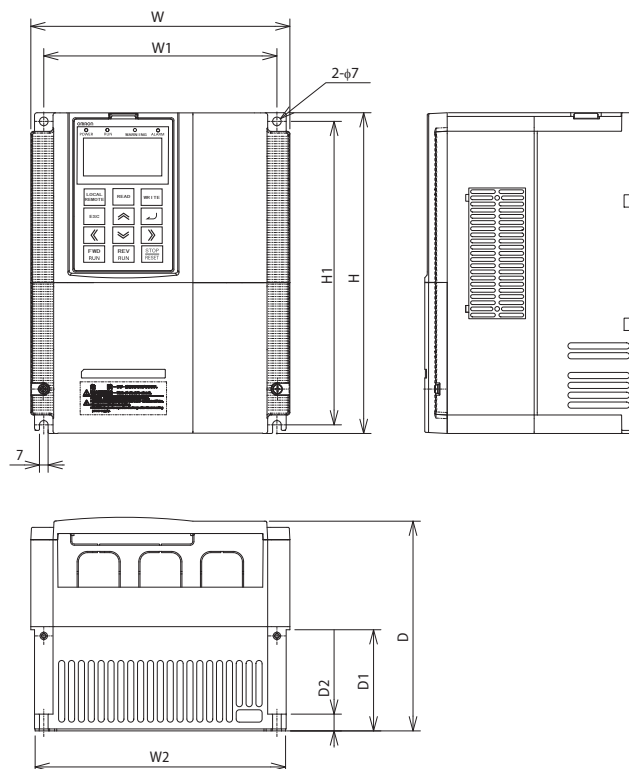


Figure 4

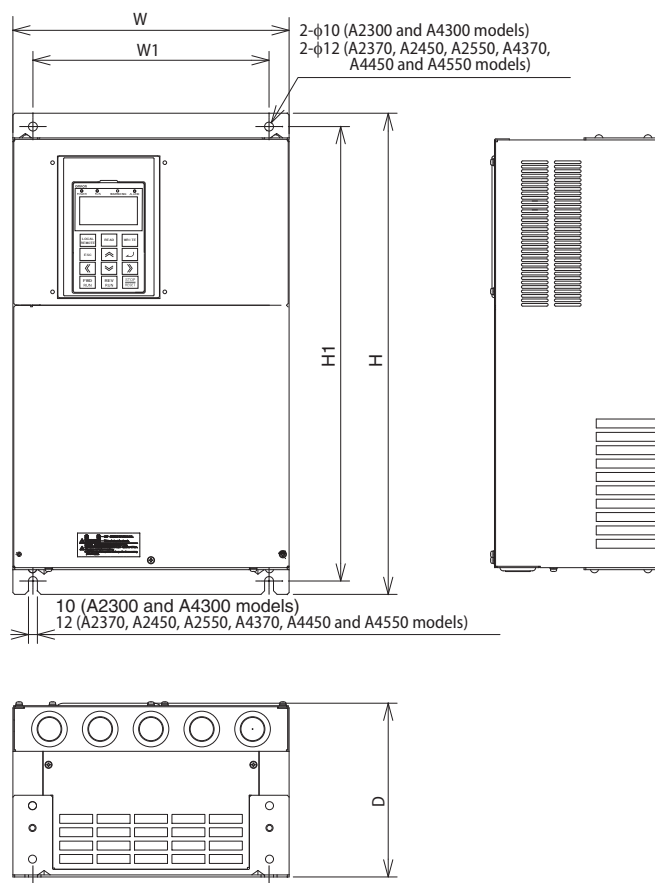
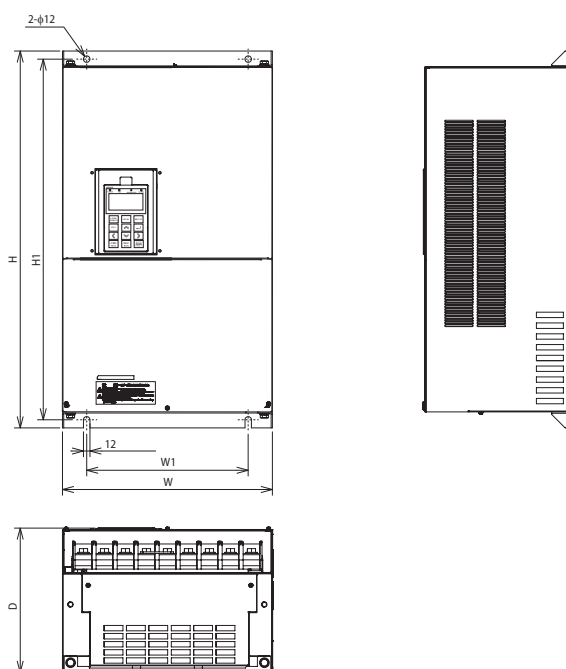


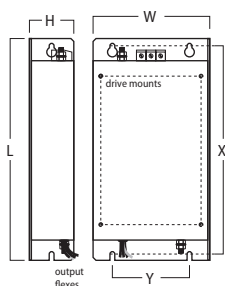
Figure 5



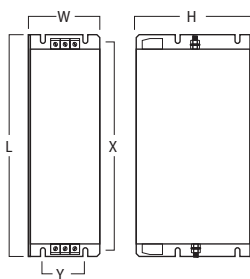
| Voltage class     | Drive model | Figure | Dimensions in mm |     |     |     |     |     |    |      | Weight (kg) |
|-------------------|-------------|--------|------------------|-----|-----|-----|-----|-----|----|------|-------------|
|                   |             |        | W                | W1  | W2  | H   | H1  | D   | D1 | D2   |             |
| Three-phase 200 V | 3G3RX-A2004 | 1      | 150              | 130 | 143 | 255 | 241 | 140 | 62 | –    | 3.5         |
|                   | 3G3RX-A2007 |        |                  |     |     |     |     |     |    |      |             |
|                   | 3G3RX-A2015 |        |                  |     |     |     |     |     |    |      |             |
|                   | 3G3RX-A2022 |        |                  |     |     |     |     |     |    |      |             |
|                   | 3G3RX-A2037 |        |                  |     |     |     |     |     |    |      |             |
|                   | 3G3RX-A2055 | 2      | 210              | 189 | 203 | 260 | 246 | 170 | 82 | 13.6 | 6           |
|                   | 3G3RX-A2075 |        |                  |     |     |     |     |     |    |      |             |
|                   | 3G3RX-A2110 |        |                  |     |     |     |     |     |    |      |             |
|                   | 3G3RX-A2150 | 3      | 250              | 229 | 244 | 390 | 376 | 190 | 83 | 9.5  | 14          |
|                   | 3G3RX-A2185 |        |                  |     |     |     |     |     |    |      |             |
|                   | 3G3RX-A2220 |        |                  |     |     |     |     |     |    |      |             |
|                   | 3G3RX-A2300 | 4      | 310              | 265 | –   | 540 | 510 | 195 | –  | –    | 20          |
|                   | 3G3RX-A2370 |        | 390              | 300 | –   | 550 | 520 | 250 | –  | –    | 30          |
|                   | 3G3RX-A2450 |        |                  |     |     |     |     |     |    |      |             |
|                   | 3G3RX-A2550 |        | 480              | 380 | –   | 700 | 670 | 250 | –  | –    | 43          |
| Three-phase 400 V | 3G3RX-A4004 | 1      | 150              | 130 | 143 | 255 | 241 | 140 | 62 | –    | 3.5         |
|                   | 3G3RX-A4007 |        |                  |     |     |     |     |     |    |      |             |
|                   | 3G3RX-A4015 |        |                  |     |     |     |     |     |    |      |             |
|                   | 3G3RX-A4022 |        |                  |     |     |     |     |     |    |      |             |
|                   | 3G3RX-A4040 |        |                  |     |     |     |     |     |    |      |             |
|                   | 3G3RX-A4055 | 2      | 210              | 189 | 203 | 260 | 246 | 170 | 82 | 13.6 | 6           |
|                   | 3G3RX-A4075 |        |                  |     |     |     |     |     |    |      |             |
|                   | 3G3RX-A4110 |        |                  |     |     |     |     |     |    |      |             |
|                   | 3G3RX-A4150 | 3      | 250              | 229 | 244 | 390 | 376 | 190 | 83 | 9.5  | 14          |
|                   | 3G3RX-A4185 |        |                  |     |     |     |     |     |    |      |             |
|                   | 3G3RX-A4220 |        |                  |     |     |     |     |     |    |      |             |
|                   | 3G3RX-A4300 | 4      | 310              | 265 | –   | 540 | 510 | 195 | –  | –    | 22          |
|                   | 3G3RX-A4370 |        | 390              | 300 | –   | 550 | 520 | 250 | –  | –    | 30          |
|                   | 3G3RX-A4450 |        |                  |     |     |     |     |     |    |      |             |
|                   | 3G3RX-A4550 |        |                  |     |     |     |     |     |    |      |             |
|                   | 3G3RX-B4750 | 5      | 390              | 300 | –   | 700 | 670 | 270 | –  | –    | 60          |
|                   | 3G3RX-B4900 |        |                  |     |     |     |     |     |    |      |             |
|                   | 3G3RX-B411K |        |                  |     |     |     |     |     |    |      |             |
|                   | 3G3RX-B413K |        |                  |     |     |     |     |     |    |      |             |

## Rasmi filters

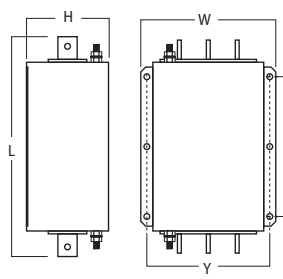
Footprint dimensions



Book type dimensions

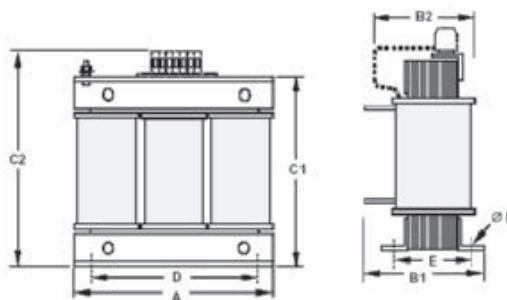


Block type dimensions



| Voltage class | Drive model   | Rasmi model   | Filter type | Dimensions in mm |     |     |     |     |    |             |      |
|---------------|---------------|---------------|-------------|------------------|-----|-----|-----|-----|----|-------------|------|
|               |               |               |             | L                | W   | H   | X   | Y   | M  | Weight (kg) |      |
| 3-phase 200 V | 3G3RX-A2004   | AX-FIR2018-RE | Footprint   | 305              | 152 | 45  | 290 | 110 | M5 | 2.0         |      |
|               | 3G3RX-A2007   |               |             |                  |     |     |     |     |    |             |      |
|               | 3G3RX-A2015   |               |             |                  |     |     |     |     |    |             |      |
|               | 3G3RX-A2022   |               |             |                  |     |     |     |     |    |             |      |
|               | 3G3RX-A2037   |               |             |                  |     |     |     |     |    |             |      |
|               | 3G3RX-A2055   | AX-FIR2053-RE |             | 320              | 212 | 56  | 296 | 189 | M6 | 2.5         |      |
|               | 3G3RX-A2075   |               |             |                  |     |     |     |     |    |             |      |
|               | 3G3RX-A2110   |               |             |                  |     |     |     |     |    |             |      |
|               | 3G3RX-A2150   | AX-FIR2110-RE | Book        | 455              | 110 | 240 | 414 | 80  |    | 8.0         |      |
|               | 3G3RX-A2185   |               |             |                  |     |     |     |     |    |             |      |
|               | 3G3RX-A2220   |               |             |                  |     |     |     |     |    |             |      |
|               | 3G3RX-A2300   | AX-FIR2145-RE |             |                  |     |     |     |     |    |             | 8.6  |
|               | 3G3RX-A2370   | AX-FIR3250-RE | Block       | 386              | 260 | 135 | 240 | 235 | –  |             | 13   |
|               | 3G3RX-A2450   |               |             |                  |     |     |     |     |    |             |      |
| 3G3RX-A2550   | AX-FIR3320-RE |               |             |                  |     |     |     |     |    | 13.2        |      |
| 3-phase 400 V | 3G3RX-A4004   | AX-FIR3010-RE | Footprint   | 305              | 152 | 45  | 290 | 110 | M5 | 1.4         |      |
|               | 3G3RX-A4007   |               |             |                  |     |     |     |     |    |             |      |
|               | 3G3RX-A4015   |               |             |                  |     |     |     |     |    |             |      |
|               | 3G3RX-A4022   |               |             |                  |     |     |     |     |    |             |      |
|               | 3G3RX-A4040   |               |             |                  |     |     |     |     |    |             |      |
|               | 3G3RX-A4055   | AX-FIR3030-RE |             | 312              | 212 | 50  | 296 | 189 | M6 | 2.2         |      |
|               | 3G3RX-A4075   |               |             |                  |     |     |     |     |    |             |      |
|               | 3G3RX-A4110   |               |             |                  |     |     |     |     |    |             |      |
|               | 3G3RX-A4150   | AX-FIR3053-RE |             | 451              | 252 | 60  | 435 | 229 | M6 | 4.5         |      |
|               | 3G3RX-A4185   |               |             |                  |     |     |     |     |    |             |      |
|               | 3G3RX-A4220   |               |             |                  |     |     |     |     |    |             |      |
|               | 3G3RX-A4300   | AX-FIR3064-RE |             | 598              | 310 | 70  | 578 | 265 | M8 | 7.0         |      |
|               | 3G3RX-A4370   | AX-FIR3100-RE | Book        | 486              | 110 | 240 | 414 | 80  | –  |             | 8.0  |
|               | 3G3RX-A4450   | AX-FIR3130-RE |             |                  |     |     |     |     |    |             | 8.6  |
|               | 3G3RX-A4550   |               |             |                  |     |     |     |     |    |             |      |
|               | 3G3RX-B4750   | AX-FIR3250-RE | Block       | 386              | 260 | 135 | 240 | 235 | –  |             | 13.0 |
|               | 3G3RX-B4900   |               |             |                  |     |     |     |     |    |             |      |
|               | 3G3RX-B411K   | AX-FIR3320-RE |             |                  |     |     |     |     |    |             |      |
| 3G3RX-B413K   |               |               |             |                  |     |     |     |     |    |             | 13.2 |

## Input AC reactor



| Voltage class | Reference         | Dimensions in mm |     |      |     |      |      |      |     |             |
|---------------|-------------------|------------------|-----|------|-----|------|------|------|-----|-------------|
|               |                   | A                | B1  | B2   | C1  | C2   | D    | E    | F   | Weight (kg) |
| 3-phase 200 V | AX-RAI02800080-DE | 120              | –   | 70   | –   | 120  | 80   | 52   | 5.5 | 1.78        |
|               | 80                |                  |     | 62   |     |      |      | 2.35 |     |             |
|               | AX-RAI00350335-DE | 180              |     | 85   |     | 190  | 140  | 55   | 6   | 5.5         |
|               | AX-RAI00180670-DE |                  | 205 | 11.7 |     |      |      |      |     |             |
|               | AX-RAI00091000-DE |                  |     |      |     |      |      |      |     |             |
|               | AX-RAI00071550-DE |                  |     |      |     | 85   |      |      |     |             |
|               | AX-RAI00042300-DE |                  | 120 | –    | 150 | –    |      |      |     |             |
| 3-phase 400 V | AX-RAI07700050-DE | 120              | –   | 70   | –   | 120  | 80   | 52   | 5.5 | 1.78        |
|               | 80                |                  |     | 62   |     |      |      | 2.35 |     |             |
|               | AX-RAI01300170-DE | 180              |     | 75   |     | 195  | 140  | 55   | 6   | 5.5         |
|               | AX-RAI00740335-DE |                  | 85  | 190  |     | 11.2 |      |      |     |             |
|               | AX-RAI00360500-DE |                  | 205 | 75   |     |      |      |      |     |             |
|               | AX-RAI00290780-DE |                  |     |      |     |      | 105  |      |     |             |
|               | AX-RAI00191150-DE |                  | 240 | 110  | 275 | 200  | 16.0 |      |     |             |
|               | AX-RAI00111850-DE | 180              |     | –    | 210 | –    | 110  | 25.4 |     |             |
|               | AX-RAI00072700-DE |                  |     |      |     |      |      |      |     |             |

## DC reactor

Figure 1

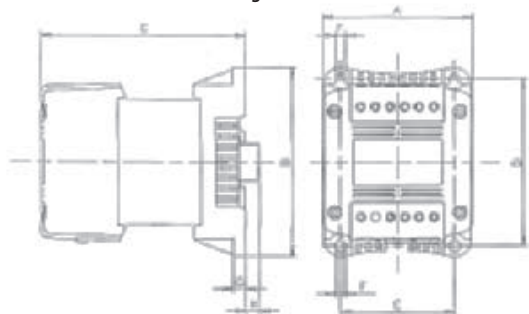
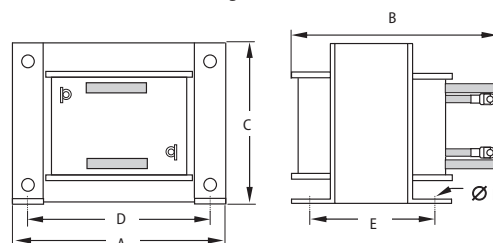


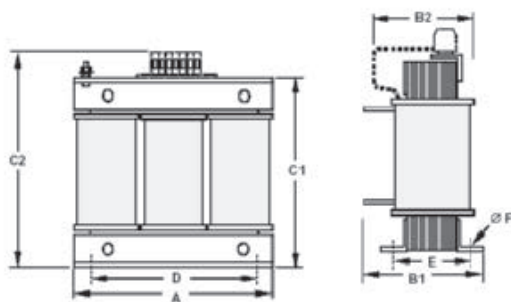
Figure 2



| Voltage class | Reference        | Fig | Dimensions in mm |     |     |     |     |     |     |     | Weight (kg) |
|---------------|------------------|-----|------------------|-----|-----|-----|-----|-----|-----|-----|-------------|
|               |                  |     | A                | B   | C   | D   | E   | F   | G   | H   |             |
| 3-phase 200 V | AX-RC10700032-DE | 1   | 84               | 113 | 96  | 101 | 66  | 5   | 7.5 | 2   | 1.22        |
|               | AX-RC06750061-DE |     |                  |     | 105 |     |     |     |     |     | 1.60        |
|               | AX-RC03510093-DE |     |                  |     |     |     |     |     |     |     |             |
|               | AX-RC02510138-DE |     |                  |     | 116 |     |     |     |     |     | 1.95        |
|               | AX-RC01600223-DE | 1   | 108              | 135 | 124 | 120 | 82  | 6.5 | 9.5 | 9.5 | 3.20        |
|               | AX-RC01110309-DE |     | 120              | 152 | 136 | 135 | 94  | 7   |     | –   | 5.20        |
|               | AX-RC00840437-DE |     |                  |     | 146 |     |     |     |     |     | 6.00        |
|               | AX-RC00590614-DE |     | 150              | 177 | 160 | 160 | 115 |     | 2   |     | 11.4        |
|               | AX-RC00440859-DE |     |                  |     | 183 |     |     |     |     |     | 14.3        |
|               | AX-RC00301275-DE | 2   | 195              | 161 | 163 | 185 | 88  | 10  | –   | –   | 17.0        |
|               | AX-RC00231662-DE |     |                  | 196 |     |     | 123 |     |     |     | 25.0        |
|               | AX-RC00192015-DE |     | 240              | 188 | 200 | 228 | 109 | 12  |     |     | 34.0        |
|               | AX-RC00162500-DE |     |                  | 208 |     |     | 129 |     |     |     | 42.0        |
|               | AX-RC00133057-DE |     |                  | 228 |     |     | 149 |     |     |     | 48.0        |

| Voltage class | Reference        | Fig | Dimensions in mm |     |      |     |      |    |     |   |             |     |     |     |     |      |
|---------------|------------------|-----|------------------|-----|------|-----|------|----|-----|---|-------------|-----|-----|-----|-----|------|
|               |                  |     | A                | B   | C    | D   | E    | F  | G   | H | Weight (kg) |     |     |     |     |      |
| 3-phase 400 V | AX-RC43000020-DE | 1   | 84               | 113 | 96   | 101 | 66   | 5  | 7.5 | 2 | 1.22        |     |     |     |     |      |
|               | 105              |     |                  |     | 1.60 |     |      |    |     |   |             |     |     |     |     |      |
|               | 116              |     |                  |     | 1.95 |     |      |    |     |   |             |     |     |     |     |      |
|               | 108              |     |                  |     | 135  |     |      |    |     |   | 133         | 120 | 82  | 6.5 | 9.5 | 9.5  |
|               | AX-RC06400116-DE |     | 120              | 152 | 136  | 135 | 94   | 7  |     | - | 5.20        |     |     |     |     |      |
|               | 146              |     |                  |     | 6.00 |     |      |    |     |   |             |     |     |     |     |      |
|               | AX-RC03350219-DE |     | 150              | 177 | 160  | 160 | 115  | 7  | 2   |   | 11.4        |     |     |     |     |      |
|               | 183              |     |                  |     | 14.3 |     |      |    |     |   |             |     |     |     |     |      |
|               | AX-RC01750430-DE |     |                  |     |      |     |      |    |     |   |             |     |     |     |     |      |
|               | AX-RC01200644-DE | 2   | 195              | 161 | 163  | 185 | 88   | 10 | -   | - | 17.0        |     |     |     |     |      |
|               | 196              |     |                  | 123 |      |     | 25.5 |    |     |   |             |     |     |     |     |      |
|               | AX-RC00920797-DE |     | 240              | 188 | 200  | 228 | 109  | 12 |     |   | 34.0        |     |     |     |     |      |
|               | 198              |     |                  |     |      |     | 119  |    |     |   | 38.0        |     |     |     |     |      |
|               | 228              |     |                  |     |      |     | 149  |    |     |   | 48.0        |     |     |     |     |      |
|               | AX-RC00501529-DE |     |                  |     |      |     | 300  |    |     |   | 230         | 256 | 250 | 160 |     | 49.0 |
|               | 245              |     |                  |     |      |     |      |    |     |   |             |     |     |     |     | 52.5 |
|               | AX-RC00252981-DE |     | 250              | 180 | 79.0 |     |      |    |     |   |             |     |     |     |     |      |

## Output AC reactor



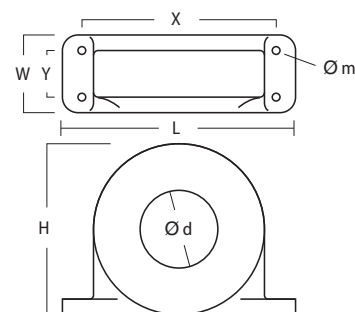
| Voltage class | Reference         | Dimensions in mm |     |     |     |     |     |     |     |             |
|---------------|-------------------|------------------|-----|-----|-----|-----|-----|-----|-----|-------------|
|               |                   | A                | B1  | B2  | C1  | C2  | D   | E   | F   | Weight (kg) |
| 3-phase 200 V | AX-RAO11500026-DE | 120              | –   | 70  | –   | 120 | 80  | 52  | 5.5 | 1.78        |
|               | AX-RAO07600042-DE | 120              | –   | 70  | –   | 120 | 80  | 52  | 5.5 | 1.78        |
|               | AX-RAO04100075-DE | 120              | –   | 80  | –   | 120 | 80  | 62  | 5.5 | 2.35        |
|               | AX-RAO03000105-DE | 120              | –   | 80  | –   | 120 | 80  | 62  | 5.5 | 2.35        |
|               | AX-RAO01830160-DE | 180              | –   | 85  | –   | 195 | 140 | 55  | 6   | 5.5         |
|               | AX-RAO01150220-DE | 180              | –   | 85  | –   | 195 | 140 | 55  | 6   | 5.5         |
|               | AX-RAO00950320-DE | 180              | –   | 85  | –   | 210 | 140 | 55  | 6   | 6.5         |
|               | AX-RAO00630430-DE | 180              | –   | 95  | –   | 210 | 140 | 65  | 6   | 9.1         |
|               | AX-RAO00490640-DE | 180              | –   | 105 | –   | 210 | 140 | 75  | 6   | 11.7        |
|               | AX-RAO00390800-DE | 240              | –   | 110 | –   | 275 | 200 | 75  | 6   | 16.0        |
|               | AX-RAO00330950-DE | 240              | –   | 110 | –   | 275 | 200 | 75  | 6   | 16.0        |
|               | AX-RAO00251210-DE | 240              | –   | 110 | –   | 300 | 200 | 75  | 6   | 16.0        |
|               | AX-RAO00191450-DE | 240              | 130 | –   | 215 | –   | 200 | 85  | 6   | 18.6        |
|               | AX-RAO00161820-DE | 240              | 160 | –   | 215 | –   | 200 | 110 | 6   | 27.0        |
|               | AX-RAO00132200-DE | 300              | 165 | –   | 300 | –   | 200 | 125 | 6   | 33.5        |



| Voltage class | Reference         | Dimensions in mm |     |     |     |     |     |     |     |             |
|---------------|-------------------|------------------|-----|-----|-----|-----|-----|-----|-----|-------------|
|               |                   | A                | B1  | B2  | C1  | C2  | D   | E   | F   | Weight (kg) |
| 3-phase 400 V | AX-RAO16300038-DE | 120              | –   | 80  | –   | 120 | 80  | 62  | 5.5 | 2.35        |
|               | AX-RAO11800053-DE | 120              | –   | 80  | –   | 120 | 80  | 62  | 5.5 | 2.35        |
|               | AX-RAO07300080-DE | 180              | –   | 85  | –   | 195 | 140 | 55  | 6   | 5.5         |
|               | AX-RAO04600110-DE | 180              | –   | 85  | –   | 195 | 140 | 55  | 6   | 5.5         |
|               | AX-RAO03600160-DE | 180              | –   | 85  | –   | 210 | 140 | 55  | 6   | 6.5         |
|               | AX-RAO02500220-DE | 180              | –   | 95  | –   | 210 | 140 | 65  | 6   | 9.1         |
|               | AX-RAO02000320-DE | 240              | –   | 110 | –   | 275 | 200 | 75  | 6   | 16.0        |
|               | AX-RAO01650400-DE | 240              | –   | 110 | –   | 275 | 200 | 75  | 6   | 16.0        |
|               | AX-RAO01300480-DE | 240              | –   | 110 | –   | 275 | 200 | 75  | 6   | 16.0        |
|               | AX-RAO01030580-DE | 240              | –   | 110 | –   | 281 | 200 | 75  | 6   | 16.0        |
|               | AX-RAO00800750-DE | 240              | –   | 120 | –   | 281 | 200 | 85  | 6   | 18.6        |
|               | AX-RAO00680900-DE | 240              | –   | 150 | –   | 281 | 200 | 110 | 6   | 27.0        |
|               | AX-RAO00531100-DE | 300              | –   | 125 | –   | 350 | 200 | 105 | 6   | 27.9        |
|               | AX-RAO00401490-DE | 300              | 170 | –   | 270 | –   | 200 | 125 | 6   | 44.0        |
|               | AX-RAO00331760-DE | 300              | 170 | –   | 270 | –   | 200 | 125 | 6   | 44.0        |
|               | AX-RAO00262170-DE | 360              | 230 | –   | 315 | –   | 300 | 150 | 8   | 55.0        |
|               | AX-RAO00212600-DE | 420              | 240 | –   | 370 | –   | 300 | 150 | 8   | 75.0        |

## Chokes

| Reference     | Diameter | Motor kW | Dimensions in mm |    |     |     |    |   |             |
|---------------|----------|----------|------------------|----|-----|-----|----|---|-------------|
|               |          |          | L                | W  | H   | X   | Y  | m | Weight (kg) |
| AX-FER2102-RE | 21       | <2.2     | 85               | 22 | 46  | 70  | –  | 5 | 0.1         |
| AX-FER2515-RE | 25       | <15      | 105              | 25 | 62  | 90  | –  | 5 | 0.2         |
| AX-FER5045-RE | 50       | <45      | 150              | 50 | 110 | 125 | 30 | 5 | 0.7         |
| AX-FER6055-RE | 60       | 355      | 200              | 65 | 170 | 180 | 45 | 6 | 1.7         |



## DC Supply with Regenerative Active Front End

## Regenerative DC bus supply

Figure 1

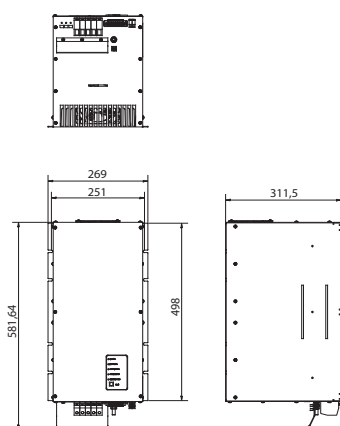


Figure 2

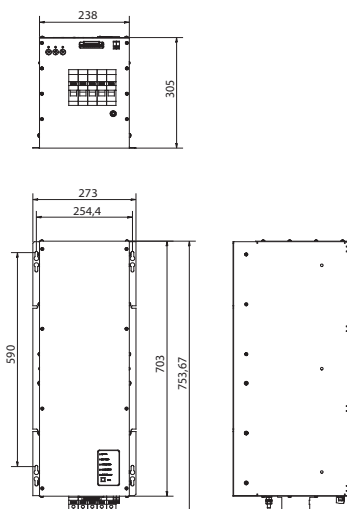
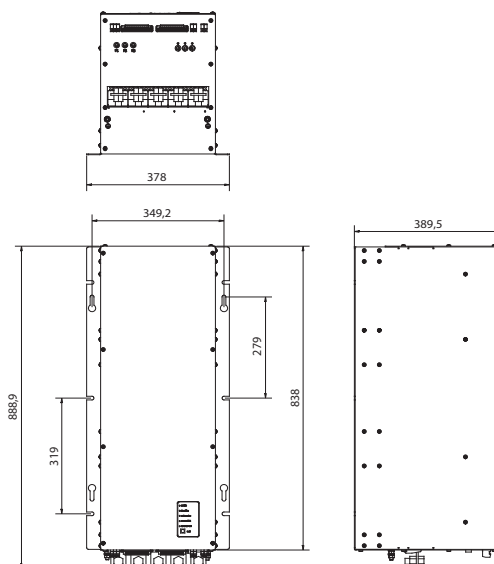


Figure 3



| Reference                   | Fig | Weight (kg) |
|-----------------------------|-----|-------------|
| RFE-B3 30-400-50-230-A-RVE  | 1   | 37          |
| RFE-B3 45-400-50-230-A-RVE  |     | 38          |
| RFE-B3 60-400-50-230-A-RVE  | 2   | 45          |
| RFE-B3 80-400-50-230-A-RVE  |     | 52          |
| RFE-B3 100-400-50-230-A-RVE |     | 65          |
| RFE-B3 125-400-50-230-A-RVE | 3   | 87          |
| RFE-B3 150-400-50-230-A-RVE |     | 89          |
| RFE-B3 200-400-50-230-A-RVE |     | 100         |

## Low harmonic filter

Figure 1

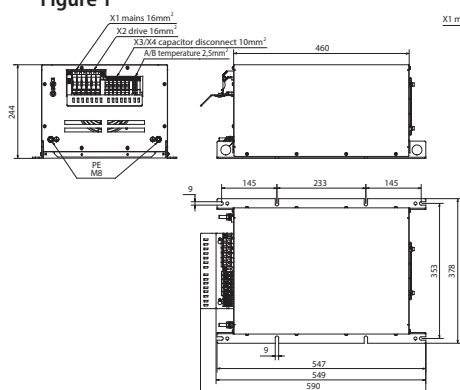


Figure 2

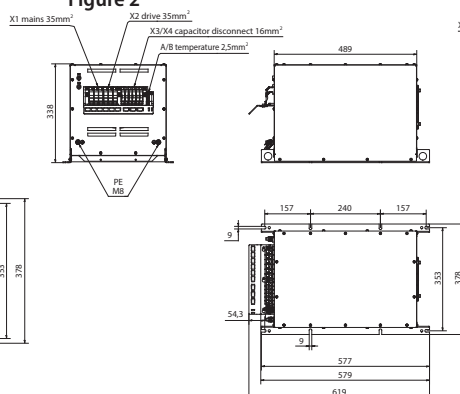


Figure 3

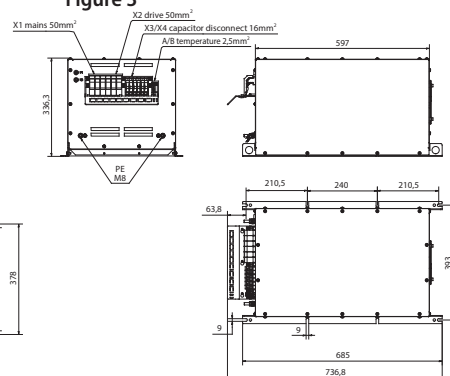


Figure 4

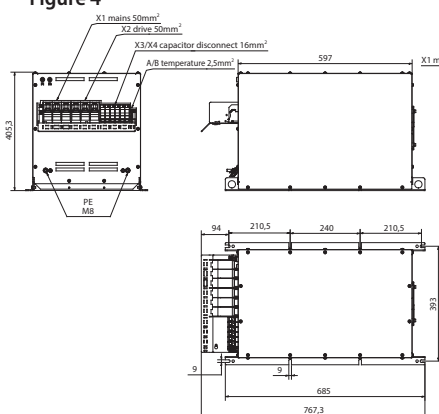
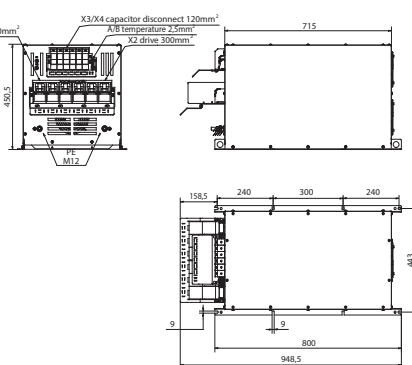


Figure 5



| Reference                  | Fig | Weight (kg) |
|----------------------------|-----|-------------|
| RHF-RA 43-400-50-20-A-RVE  | 1   | 39          |
| RHF-RA 72-400-50-20-A-RV   | 2   | 56          |
| RHF-RA 86-400-50-20-A-RVE  | 3   | 62          |
| RHF-RA 144-400-50-20-A-RVE | 4   | 85          |
| RHF-RA 180-400-50-20-A-RVE |     | 102         |
| RHF-RA 217-400-50-20-A-RVE | 5   | 119         |
| RHF-RA 304-400-50-20-A-RVE |     | 142         |

## EMC filter

Figure 1

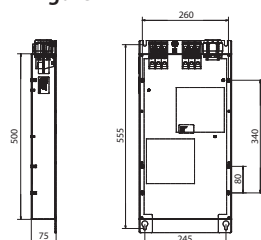


Figure 2

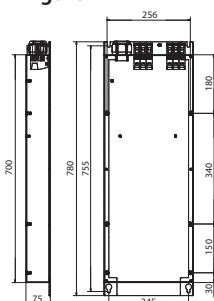


Figure 3

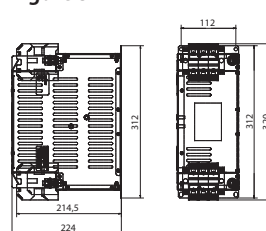
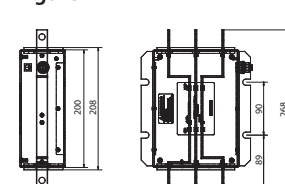


Figure 4



| Reference     | Fig | Filter type | Weight (kg) |
|---------------|-----|-------------|-------------|
| RFI-RA 12-RVE | 1   | Footprint   | 11,1        |
| RFI-RA 23-RVE | 2   |             | 15,1        |
| RFI-RA X5-RVE | 3   | Book        | 4,9         |
| RFI-RA X6-RVE | 4   | Block       | 3,9         |

## Regenerative Braking unit

Figure 1

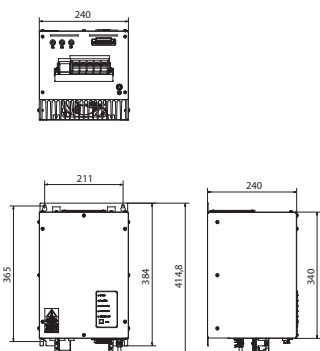


Figure 2

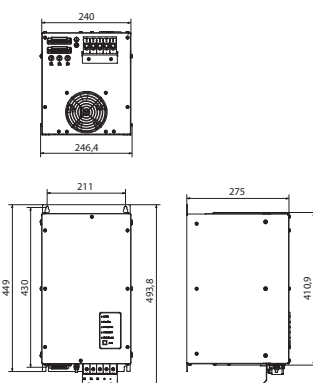


Figure 3

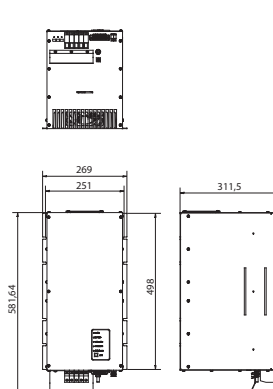


Figure 4

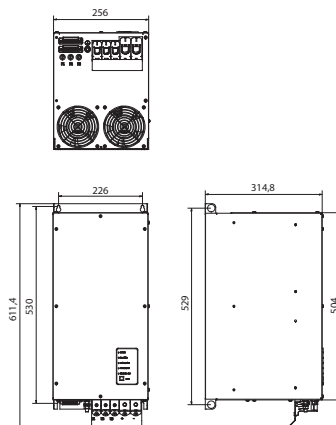


Figure 5

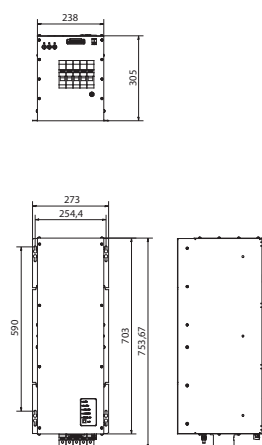


Figure 6

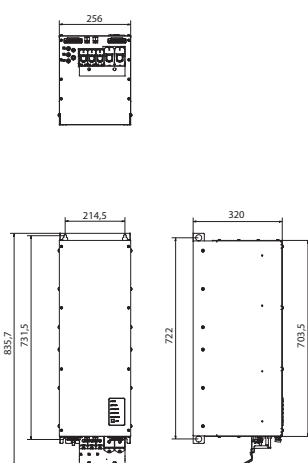
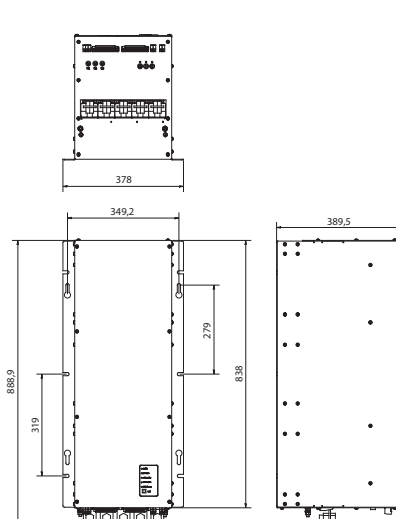


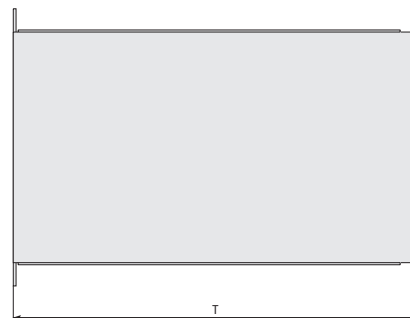
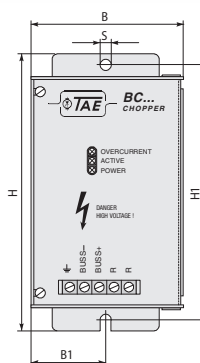
Figure 7



| Models for Low Duty applications (50%) | Fig | Weight (kg) | Models for High Duty applications | Fig | Weight (kg) |
|----------------------------------------|-----|-------------|-----------------------------------|-----|-------------|
| RLD-E0 8-400-50-0-A-RVE                | 1   | 16          | RHD-B0 7-400-50-0-A-RVE           | 1   | 17          |
| RLD-E0 12-400-50-0-A-RVE               |     | 17          | RHD-B0 13-400-50-0-A-RVE          |     | 18          |
| RLD-E0 16-400-50-0-A-RVE               |     | 18          | RHD-B0 18-400-50-0-A-RVE          |     | 20          |
| RLD-E0 20-400-50-0-A-RVE               | 2   |             | RHD-B0 24-400-50-0-A-RVE          | 3   | 32,5        |
| RLD-E0 24-400-50-0-A-RVE               |     |             | RHD-B0 30-400-50-230-A-RVE        |     |             |
| RLD-E0 32-400-50-0-A-RVE               |     | 22          | RHD-B0 50-400-50-230-A-RVE        | 5   | 40          |
| RLD-E0 40-400-50-0-A-RVE               | 4   | 23          | RHD-B0 70-400-50-230-A-RVE        |     | 51          |
| RLD-E0 48-400-50-0-A-RVE               |     | 27          | RHD-B0 100-400-50-230-A-RVE       | 7   | 85          |
| RLD-E0 58-400-50-0-A-RVE               |     | 28          | RHD-B0 125-400-50-230-A-RVE       |     | 91          |
| RLD-E0 80-400-50-0-A-RVE               |     | 30          | RHD-B0 150-400-50-230-A-RVE       |     | 100         |
| RLD-E0 95-400-50-0-A-RVE               |     | 35          |                                   |     |             |
| RLD-E0 116-400-50-0-A-RVE              |     | 38          |                                   |     |             |
| RLD-E0 140-400-50-0-A-RVE              | 6   | 52          |                                   |     |             |
| RLD-E0 170-400-50-230-A-RVE            |     | 60          |                                   |     |             |
| RLD-E0 200-400-50-230-A-RVE            |     | 68          |                                   |     |             |

## Braking unit

| Reference        | Dimensions in mm |      |     |     |     |   |
|------------------|------------------|------|-----|-----|-----|---|
|                  | B                | B1   | H   | H1  | T   | S |
| AX-BCR4015045-TE | 82.5             | 40.5 | 150 | 138 | 220 | 6 |
| AX-BCR4017068-TE |                  |      |     |     |     |   |
| AX-BCR2035090-TE | 130              | 64.5 | 205 | 193 | 208 | 6 |
| AX-BCR2070130-TE |                  |      |     |     |     |   |
| AX-BCR4035090-TE |                  |      |     |     |     |   |
| AX-BCR4070130-TE |                  |      |     |     |     |   |
| AX-BCR4090240-TE | 131              | 64.5 | 298 | 280 | 300 | 9 |



## Resistor

AX-REM00K15xxx

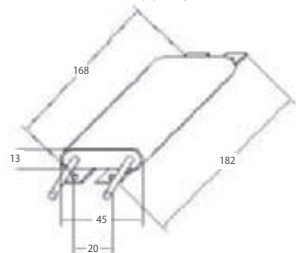


Fig 3

Fig 1

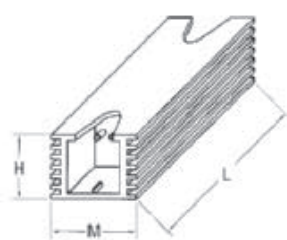


Fig 4

Fig 2

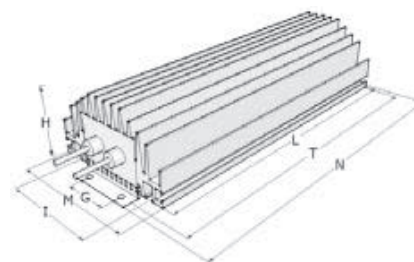
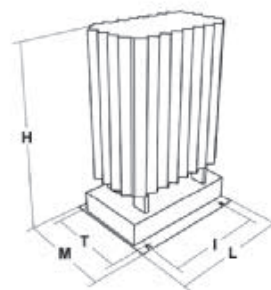
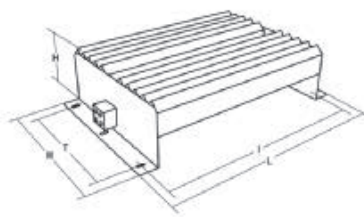
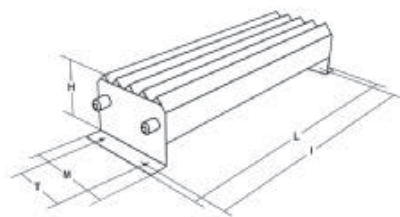


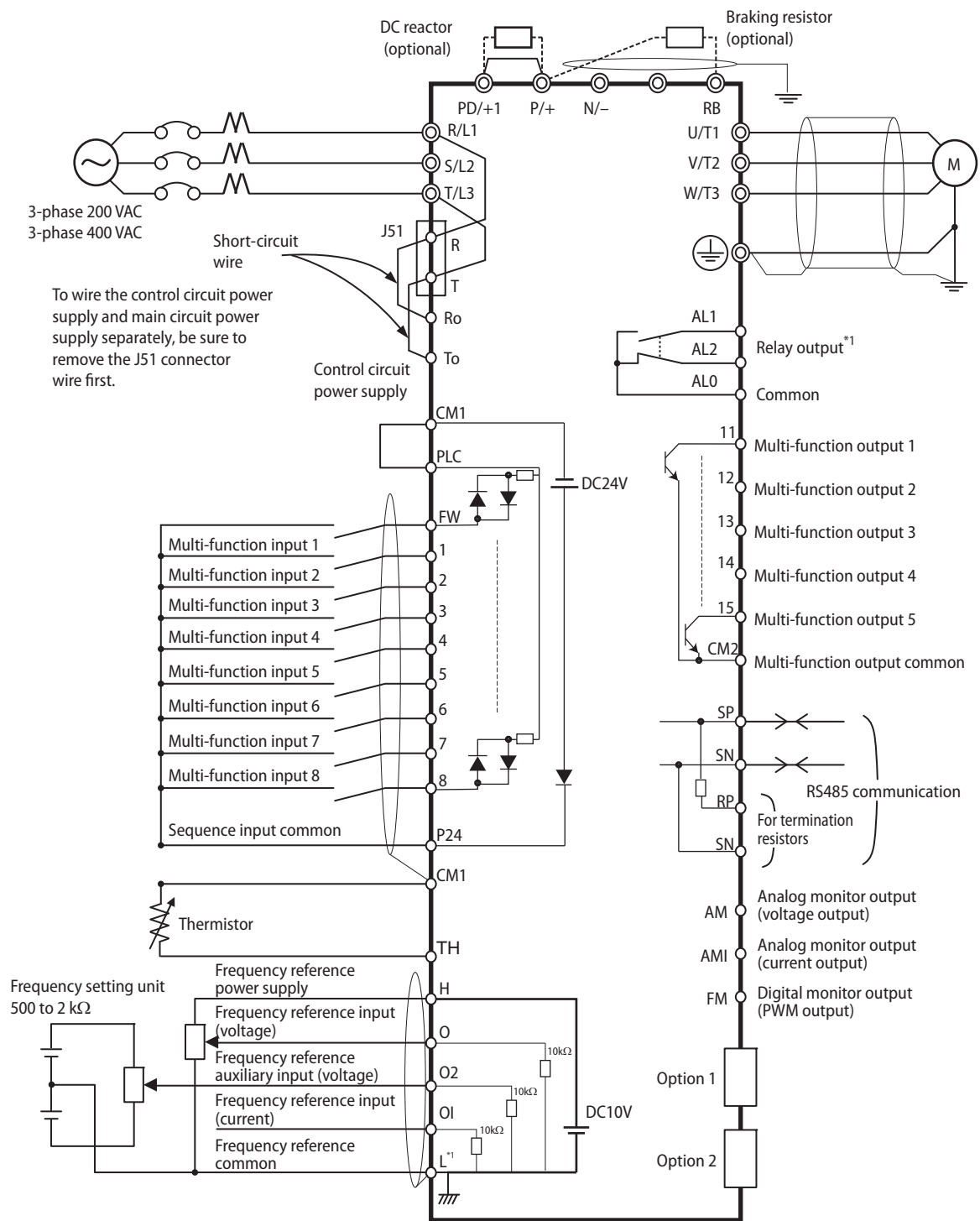
Fig 5



| Reference        | Fig | Dimensions in mm |     |     |      |     |    |      |             |
|------------------|-----|------------------|-----|-----|------|-----|----|------|-------------|
|                  |     | L                | H   | M   | I    | T   | G  | N    | Weight (kg) |
| AX-REM00K2070-IE | 1   | 105              | 27  | 36  | 94   | —   | —  | —    | 0.2         |
| AX-REM00K2120-IE |     |                  |     |     |      |     |    |      |             |
| AX-REM00K2200-IE |     |                  |     |     |      |     |    |      |             |
| AX-REM00K4075-IE |     |                  |     |     |      |     |    |      |             |
| AX-REM00K4035-IE |     | 200              | 27  | 36  | 189  | —   | —  | —    | 0.425       |
| AX-REM00K4030-IE |     |                  |     |     |      |     |    |      |             |
| AX-REM00K5120-IE |     |                  |     |     |      |     |    |      |             |
| AX-REM00K6100-IE |     |                  |     |     |      |     |    |      |             |
| AX-REM00K6035-IE | 260 | 27               | 36  | 249 | —    | —   | —  | 0.58 |             |
|                  | 320 | 27               | 36  | 309 | —    | —   | —  | 0.73 |             |
| AX-REM00K9070-IE | 2   | 200              | 61  | 100 | 74.5 | 216 | 40 | 230  | 1.41        |
| AX-REM00K9020-IE |     |                  |     |     |      |     |    |      |             |
| AX-REM00K9017-IE |     |                  |     |     |      |     |    |      |             |
| AX-REM01K9070-IE | 3   | 365              | 73  | 105 | 350  | 70  | —  | —    | 4           |
| AX-REM01K9017-IE |     |                  |     |     |      |     |    |      |             |
| AX-REM02K1070-IE | 4   | 310              | 100 | 240 | 295  | 210 | —  | —    | 7           |
| AX-REM02K1017-IE |     |                  |     |     |      |     |    |      |             |
| AX-REM03K5035-IE |     | 365              | 100 | 240 | 350  | 210 | —  | —    | 8           |
| AX-REM03K5010-IE |     |                  |     |     |      |     |    |      |             |
| AX-REM19K0006-IE | 5   | 206              | 350 | 140 | 190  | 50  | —  | —    | 8.1         |
| AX-REM19K0008-IE |     |                  |     |     |      |     |    |      |             |
| AX-REM19K0020-IE |     |                  |     |     |      |     |    |      |             |
| AX-REM19K0030-IE |     |                  |     |     |      |     |    |      |             |
| AX-REM38K0012-IE |     | 306              | 350 | 140 | 290  | 50  | —  | —    | 14.5        |

## Installation

## Standard connections



\*1 L is the common reference for analog input and also for the analog output.

## Terminal connections

| Terminal         | Name                                          | Function (signal level)                                                                                                      |
|------------------|-----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| R/L1, S/L2, T/L3 | Main circuit power supply input               | Used to connect line power to the drive                                                                                      |
| U/T1, V/T2, W/T3 | Drive output                                  | Used to connect the motor                                                                                                    |
| PD/+1, P/+       | External DC reactor terminal                  | Normally connected by the short-circuit bar. Remove the short-circuit bar between +1 and P/+2 when a DC reactor is connected |
| P/+, RB          | Braking resistor connection terminal          | Connect option braking resistor (if a braking torque is required)                                                            |
| P/+, N/-         | Regenerative braking unit connection terminal | Connect optional regenerative braking units                                                                                  |
| PE               | Grounding                                     | For grounding (grounding should conform to the local grounding code)                                                         |

## Control circuit

| Type                      | No. | Signal name                           | Function (default)                                                                                                                      | Signal level                                                                        |
|---------------------------|-----|---------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Frequency reference input | H   | Frequency reference power supply      | 10 VDC 20 mA max                                                                                                                        |                                                                                     |
|                           | O   | Voltage frequency reference input     | 0 to 12 VDC (10 k $\Omega$ )                                                                                                            |                                                                                     |
|                           | O2  | Voltage auxiliary frequency reference | 0 to $\pm$ 12 VDC (10 k $\Omega$ )                                                                                                      |                                                                                     |
|                           | OI  | Current frequency reference input     | 4 to 20 mA (100 $\Omega$ )                                                                                                              |                                                                                     |
|                           | L   | Frequency reference common            | Common terminal for analog monitor (AM, AMI) terminals                                                                                  |                                                                                     |
| Monitor output            | AM  | Multi-function analog voltage output  | Factory setting: Output frequency                                                                                                       | 2 mA max                                                                            |
|                           | AMI | Multi-function analog current output  | Factory setting: Output frequency                                                                                                       | 4 to 20 mA<br>(max imp 250 $\Omega$ )                                               |
|                           | FM  | PWM monitor output                    | Factory setting: Output frequency                                                                                                       | 0 to 10 VDC<br>(max 3.6 kHz)                                                        |
| Power supply              | P24 | Internal 24 VDC                       | Power supply for contact input signal                                                                                                   | 100 mA max                                                                          |
|                           | CM1 | Input common                          | Common terminal for P24, TH and FM digital monitor                                                                                      |                                                                                     |
| Function selection        | FW  | Forward rotation command terminal     | Motor runs in forwards direction when FW is ON                                                                                          | 27 VDC max<br>Input impd 4.7 k $\Omega$<br>max current 5.6 mA<br>On: 18 VDC or more |
|                           | 1   | Multi-function input                  | Factory setting: Reverse (RV)                                                                                                           |                                                                                     |
|                           | 2   |                                       | Factory setting: External trip (EXT)                                                                                                    |                                                                                     |
|                           | 3   |                                       | Factory setting: Reset (RS)                                                                                                             |                                                                                     |
|                           | 4   |                                       | Factory setting: Multi-step speed reference 1 (CF1)                                                                                     |                                                                                     |
|                           | 5   |                                       | Factory setting: Multi-step speed reference 2 (CF2)                                                                                     |                                                                                     |
|                           | 6   |                                       | Factory setting: Jogging (JG)                                                                                                           |                                                                                     |
|                           | 7   |                                       | Factory setting: Second control (SET)                                                                                                   |                                                                                     |
|                           | 8   |                                       | Factory setting: No allocation (NO)                                                                                                     |                                                                                     |
|                           | PLC | Multi-function input common           | Sink logic: Short-circuiting P24 and PLC<br>Source logic: Short-circuiting PLC and CM1<br>With external supply remove short-circuit bar |                                                                                     |
| Status/Factor             | 11  | Multi-function output                 | Factory setting: During Run (RUN)                                                                                                       | 27 VDC max<br>50 mA max                                                             |
|                           | 12  |                                       | Factory setting: 0 Hz signal (ZS)                                                                                                       |                                                                                     |
|                           | 13  |                                       | Factory setting: Overload warning (OL)                                                                                                  |                                                                                     |
|                           | 14  |                                       | Factory setting: Overtorque (OTQ)                                                                                                       |                                                                                     |
|                           | 15  |                                       | Factory setting: Constant speed arrival (FA1)                                                                                           |                                                                                     |
|                           | CM2 | Multi-function output common          | Common terminal for multi-function output terminals 11 to 15                                                                            |                                                                                     |
| Relay output              | AL1 | Relay output (Normally close)         | Factory setting: Alarm output (AL)                                                                                                      | R load                                                                              |
|                           | AL2 | Relay output (Normally open)          | Under normal operation                                                                                                                  | AL1-AL0                                                                             |
|                           | AL0 | Relay output common                   | MA-MC open<br>MB-MC close                                                                                                               | 250 VAC 2 A<br>AL2-AL0<br>250 VAC 1 A<br>I load<br>250 VAC 0.2 A                    |
| Sensor                    | TH  | External thermistor input terminal    | SC terminal functions as the common terminal<br>100 m $\Omega$ minimum<br>Impedance at temperature error: 3 kW                          | 0 to 8 VDC                                                                          |
| Comms                     | SP  | RS485 Modbus terminals                | —                                                                                                                                       | Differential input                                                                  |
|                           | SN  |                                       |                                                                                                                                         |                                                                                     |
|                           | RP  | RS485 terminating resistor terminals  | —                                                                                                                                       | —                                                                                   |
|                           | SN  |                                       |                                                                                                                                         |                                                                                     |

## Drive heat loss

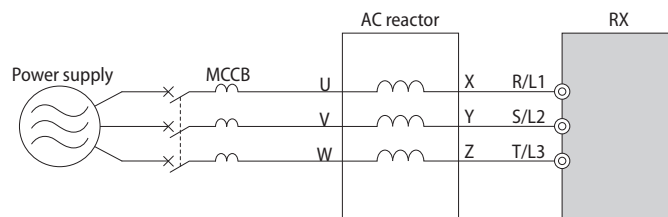
## 3G3RX 200 V class

| Three-phase: 3G3RX-__      |                     | A2004              | A2007 | A2015 | A2022 | A2037 | A2055 | A2075 | A2110 | A2150 | A2185 | A2220 | A2300 | A2370 | A2450 | A2550 |
|----------------------------|---------------------|--------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Drive capacity kVA         | 200 V               | 1.0                | 1.7   | 2.5   | 3.6   | 5.7   | 8.3   | 11.0  | 15.9  | 22.1  | 26.3  | 32.9  | 41.9  | 50.2  | 63.0  | 76.2  |
|                            | 400 V               | 1.2                | 2.0   | 3.1   | 4.3   | 6.8   | 9.9   | 13.3  | 19.1  | 26.6  | 31.5  | 39.4  | 50.2  | 60.2  | 75.6  | 91.4  |
| Rated output current A     |                     | 3.0                | 5.0   | 7.5   | 10.5  | 16.5  | 24    | 32    | 46    | 64    | 76    | 95    | 121   | 145   | 182   | 220   |
| Heat loss W                | Losses at 70% load  | 64                 | 76    | 102   | 127   | 179   | 242   | 312   | 435   | 575   | 698   | 820   | 1,100 | 1,345 | 1,625 | 1,975 |
|                            | Losses at 100% load | 70                 | 88    | 125   | 160   | 235   | 325   | 425   | 600   | 800   | 975   | 1,150 | 1,550 | 1,900 | 2,300 | 2,800 |
| Efficiency at rated output |                     | 85.1               | 89.5  | 92.3  | 93.2  | 94.0  | 94.4  | 94.6  | 94.8  | 94.9  | 95.0  | 95.0  | 95.0  | 95.1  | 95.1  | 95.1  |
| Cooling method             |                     | Forced air cooling |       |       |       |       |       |       |       |       |       |       |       |       |       |       |

## 3G3RX 400 V class

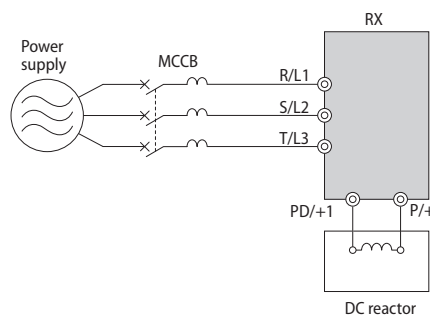
| Three-phase: 3G3RX-__      |                     | A4004              | A4007 | A4015 | A4022 | A4040 | A4055 | A4075 | A4110 | A4150 | A4185 | A4220 | A4300 | A4370 | A4450 | A4550 | B4750 | B4900 | B411K | B413K |
|----------------------------|---------------------|--------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Drive capacity kVA         | 200 V               | 1.0                | 1.7   | 2.5   | 3.6   | 6.2   | 9.7   | 13.1  | 17.3  | 22.1  | 26.3  | 33.2  | 40.1  | 51.9  | 63.0  | 77.6  | 103.2 | 121.9 | 150.3 | 180.1 |
|                            | 400 V               | 1.2                | 2.0   | 3.1   | 4.3   | 7.4   | 11.6  | 15.8  | 20.7  | 26.6  | 31.5  | 39.9  | 48.2  | 62.3  | 75.6  | 93.1  | 123.8 | 146.3 | 180.4 | 216.1 |
| Rated output current A     |                     | 1.5                | 2.5   | 3.8   | 5.3   | 9.0   | 14    | 19    | 25    | 32    | 38    | 48    | 58    | 75    | 91    | 112   | 149   | 176   | 217   | 260   |
| Heat loss W                | Losses at 70% load  | 64                 | 76    | 102   | 127   | 179   | 242   | 312   | 435   | 575   | 698   | 820   | 1,100 | 1,345 | 1,625 | 1,975 | 2,675 | 3,375 | 3,900 | 4,670 |
|                            | Losses at 100% load | 70                 | 88    | 125   | 160   | 235   | 325   | 425   | 600   | 800   | 975   | 1,150 | 1,550 | 1,900 | 2,300 | 2,800 | 3,800 | 4,800 | 5,550 | 6,650 |
| Efficiency at rated output |                     | 85.1               | 89.5  | 92.3  | 93.2  | 94.0  | 94.4  | 94.6  | 94.8  | 94.9  | 95.0  | 95.0  | 95.0  | 95.1  | 95.1  | 95.1  | 95.2  | 95.2  | 95.2  | 95.2  |
| Cooling method             |                     | Forced air cooling |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |

## Input AC reactor



| 3-phase 200 V                   |                   |                 |               | 3-phase 400 V                   |                   |                 |               |
|---------------------------------|-------------------|-----------------|---------------|---------------------------------|-------------------|-----------------|---------------|
| Max. applicable motor output kW | Reference         | Current value A | Inductance mH | Max. applicable motor output kW | Reference         | Current value A | Inductance mH |
| 0.4 to 1.5                      | AX-RAI02800080-DE | 8.0             | 2.8           | 0.4 to 1.5                      | AX-RAI07700050-DE | 5.0             | 7.7           |
| 2.2 to 3.7                      | AX-RAI00880200-DE | 20.0            | 0.88          | 2.2 to 4.0                      | AX-RAI03500100-DE | 10.0            | 3.5           |
| 5.5 to 7.5                      | AX-RAI00350335-DE | 33.5            | 0.35          | 5.5 to 7.5                      | AX-RAI01300170-DE | 17.0            | 1.3           |
| 11.0 to 15.0                    | AX-RAI00180670-DE | 67.0            | 0.18          | 11.0 to 15.0                    | AX-RAI00740335-DE | 33.5            | 0.74          |
| 18.5 to 22.0                    | AX-RAI00091000-DE | 100.0           | 0.09          | 18.5 to 22.0                    | AX-RAI00360500-DE | 50.0            | 0.36          |
| 30.0 to 37.0                    | AX-RAI00071550-DE | 155.0           | 0.07          | 30.0 to 37.0                    | AX-RAI00290780-DE | 78.0            | 0.29          |
| 45.0 to 55.0                    | AX-RAI00042300-DE | 230.0           | 0.04          | 45.0 to 55.0                    | AX-RAI00191150-DE | 115.0           | 0.19          |
|                                 |                   |                 |               | 75.0 to 90.0                    | AX-RAI00111850-DE | 185.0           | 0.11          |
|                                 |                   |                 |               | 110.0 to 132.0                  | AX-RAI00072700-DE | 270.0           | 0.07          |

## DC reactor



| 3-phase 200 V                   |                  |                 |               | 3-phase 400 V                   |                  |                 |               |
|---------------------------------|------------------|-----------------|---------------|---------------------------------|------------------|-----------------|---------------|
| Max. applicable motor output kW | Reference        | Current value A | Inductance mH | Max. applicable motor output kW | Reference        | Current value A | Inductance mH |
| 0.4                             | AX-RC10700032-DE | 3.2             | 10.70         | 0.4                             | AX-RC43000020-DE | 2.0             | 43.00         |
| 0.7                             | AX-RC06750061-DE | 6.1             | 6.75          | 0.7                             | AX-RC27000030-DE | 3.0             | 27.00         |
| 1.5                             | AX-RC03510093-DE | 9.3             | 3.51          | 1.5                             | AX-RC14000047-DE | 4.7             | 14.00         |
| 2.2                             | AX-RC02510138-DE | 13.8            | 2.51          | 2.2                             | AX-RC10100069-DE | 6.9             | 10.10         |
| 3.7                             | AX-RC01600223-DE | 22.3            | 1.60          | 4.0                             | AX-RC06400116-DE | 11.6            | 6.40          |

| 3-phase 200 V                   |                  |                 |               | 3-phase 400 V                   |                  |                 |               |
|---------------------------------|------------------|-----------------|---------------|---------------------------------|------------------|-----------------|---------------|
| Max. applicable motor output kW | Reference        | Current value A | Inductance mH | Max. applicable motor output kW | Reference        | Current value A | Inductance mH |
| 5.5                             | AX-RC01110309-DE | 30.9            | 1.11          | 5.5                             | AX-RC04410167-DE | 16.7            | 4.41          |
| 7.5                             | AX-RC00840437-DE | 43.7            | 0.84          | 7.5                             | AX-RC03350219-DE | 21.9            | 3.35          |
| 11.0                            | AX-RC00590614-DE | 61.4            | 0.59          | 11.0                            | AX-RC02330307-DE | 30.7            | 2.33          |
| 15.0                            | AX-RC00440859-DE | 85.9            | 0.44          | 15.0                            | AX-RC01750430-DE | 43.0            | 1.75          |
| 18.5 to 22                      | AX-RC00301275-DE | 127.5           | 0.30          | 18.5 to 22                      | AX-RC01200644-DE | 64.4            | 1.20          |
| 30                              | AX-RC00231662-DE | 166.2           | 0.23          | 30                              | AX-RC00920797-DE | 79.7            | 0.92          |
| 37                              | AX-RC00192015-DE | 201.5           | 0.19          | 37                              | AX-RC00741042-DE | 104.2           | 0.74          |
| 45                              | AX-RC00162500-DE | 250.0           | 0.16          | 45                              | AX-RC00611236-DE | 123.6           | 0.61          |
| 55                              | AX-RC00133057-DE | 305.7           | 0.13          | 55                              | AX-RC00501529-DE | 152.9           | 0.50          |
|                                 |                  |                 |               | 75                              | AX-RC00372094-DE | 209.4           | 0.37          |
|                                 |                  |                 |               | 90                              | AX-RC00312446-DE | 244.6           | 0.31          |
|                                 |                  |                 |               | 110                             | AX-RC00252981-DE | 298.1           | 0.25          |
|                                 |                  |                 |               | 132                             | AX-RC00213613-DE | 361.3           | 0.21          |

## Output AC reactor

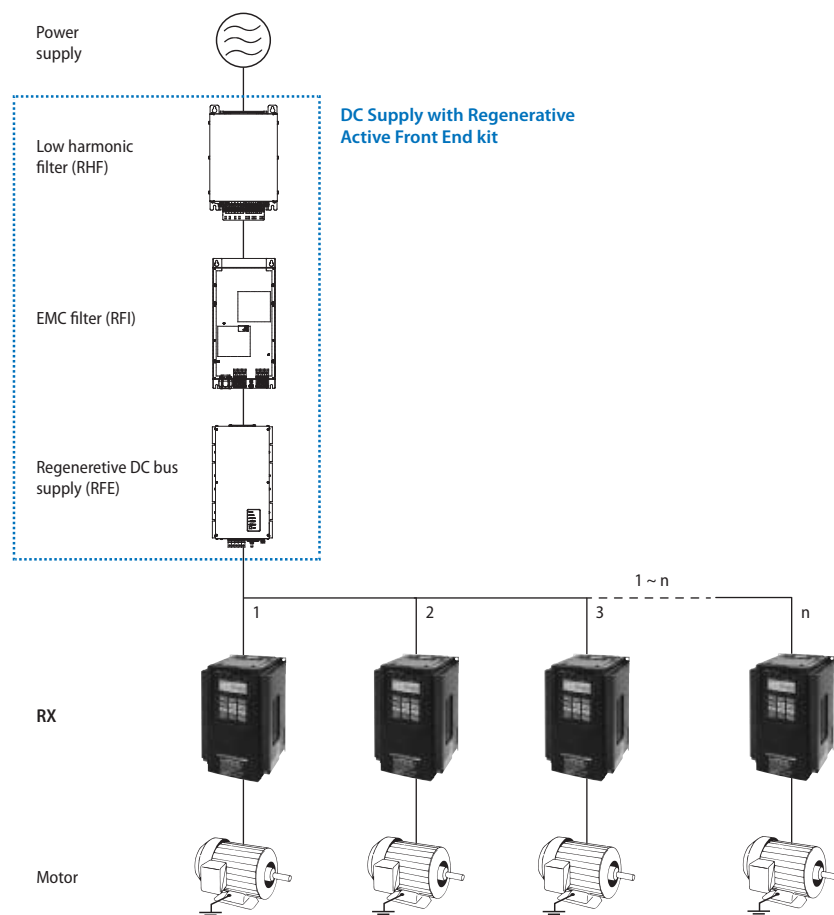
| 3-phase 200 V                   |                   |                 |               | 3-phase 400 V                   |                   |                 |               |
|---------------------------------|-------------------|-----------------|---------------|---------------------------------|-------------------|-----------------|---------------|
| Max. applicable motor output kW | Reference         | Current value A | Inductance mH | Max. applicable motor output kW | Reference         | Current value A | Inductance mH |
| 0.4                             | AX-RAO11500026-DE | 2.6             | 11.50         | 0.4 to 1.5                      | AX-RAO16300038-DE | 3.8             | 16.30         |
| 0.75                            | AX-RAO07600042-DE | 4.2             | 7.60          |                                 |                   |                 |               |
| 1.5                             | AX-RAO04100075-DE | 7.5             | 4.10          |                                 |                   |                 |               |
| 2.2                             | AX-RAO03000105-DE | 10.5            | 3.00          | 2.2                             | AX-RAO11800053-DE | 5.3             | 11.80         |
| 3.7                             | AX-RAO01830160-DE | 16.0            | 1.83          | 4.0                             | AX-RAO07300080-DE | 8.0             | 7.30          |
| 5.5                             | AX-RAO01150220-DE | 22.0            | 1.15          | 5.5                             | AX-RAO04600110-DE | 11.0            | 4.60          |
| 7.5                             | AX-RAO00950320-DE | 32.0            | 0.95          | 7.5                             | AX-RAO03600160-DE | 16.0            | 3.60          |
| 11                              | AX-RAO00630430-DE | 43.0            | 0.63          | 11                              | AX-RAO02500220-DE | 22.0            | 2.50          |
| 15                              | AX-RAO00490640-DE | 64.0            | 0.49          | 15                              | AX-RAO02000320-DE | 32.0            | 2.00          |
| 18.5                            | AX-RAO00390800-DE | 80.0            | 0.39          | 18.5                            | AX-RAO01650400-DE | 40.0            | 1.65          |
| 22                              | AX-RAO00330950-DE | 95.0            | 0.33          | 22                              | AX-RAO01300480-DE | 48.0            | 1.30          |
| 30                              | AX-RAO00251210-DE | 121.0           | 0.25          | 30                              | AX-RAO01030580-DE | 58.0            | 1.03          |
| 37                              | AX-RAO00191450-DE | 145.0           | 0.19          | 37                              | AX-RAO00800750-DE | 75.0            | 0.80          |
| 45                              | AX-RAO00161820-DE | 182.0           | 0.16          | 45                              | AX-RAO00680900-DE | 90.0            | 0.68          |
| 55                              | AX-RAO00132200-DE | 220.0           | 0.13          | 55                              | AX-RAO00531100-DE | 110.0           | 0.53          |
|                                 |                   |                 |               | 75                              | AX-RAO00401490-DE | 149.0           | 0.40          |
|                                 |                   |                 |               | 90                              | AX-RAO00331760-DE | 176.0           | 0.33          |
|                                 |                   |                 |               | 110                             | AX-RAO00262170-DE | 217.0           | 0.26          |
|                                 |                   |                 |               | 132                             | AX-RAO00212600-DE | 260.0           | 0.21          |

## Braking unit

| Voltage       | Reference        | Specifications  |                 |                 |                 |                                     |  |
|---------------|------------------|-----------------|-----------------|-----------------|-----------------|-------------------------------------|--|
|               |                  | Permanent       |                 | Peak (5 s max)  |                 | Minimum connectable resistor (Ohms) |  |
|               |                  | Current value A | Brake power kVA | Current value A | Brake power kVA |                                     |  |
| 3-phase 200 V | AX-BCR2035090-TE | 35              | 13              | 90              | 32              | 4                                   |  |
|               | AX-BCR2070130-TE | 70              | 25              | 130             | 47              | 2.8                                 |  |
| 3-phase 400 V | AX-BCR4015045-TE | 15              | 11              | 45              | 33              | 16                                  |  |
|               | AX-BCR4017068-TE | 17              | 13              | 68              | 51              | 11                                  |  |
|               | AX-BCR4035090-TE | 35              | 26              | 90              | 67              | 8.5                                 |  |
|               | AX-BCR4070130-TE | 70              | 52              | 130             | 97              | 5.5                                 |  |
|               | AX-BCR4090240-TE | 90              | 67              | 240             | 180             | 3.2                                 |  |



## DC Supply with Regenerative Active Front End system



## Regenerative DC bus supply

| Reference: RFE-B3_            |         |    | 30                                    | 45  | 60  | 80  | 100 | 125 | 150 | 200 |
|-------------------------------|---------|----|---------------------------------------|-----|-----|-----|-----|-----|-----|-----|
| Max. input power kW           |         |    | 30                                    | 45  | 60  | 80  | 100 | 125 | 150 | 200 |
| DC capacity μF                |         |    | 100                                   |     |     |     | 220 |     | 440 | 660 |
| Max. input current A*1        | Driving | AC | 65                                    | 98  | 130 | 173 | 217 | 271 | 325 | 433 |
|                               |         | DC | 78                                    | 118 | 156 | 208 | 260 | 325 | 390 | 520 |
|                               | Braking | AC | 52                                    | 78  | 104 | 139 | 173 | 217 | 260 | 346 |
|                               |         | DC | 62                                    | 97  | 125 | 167 | 208 | 260 | 312 | 415 |
| Rated input voltage           |         |    | 3-phase 400 V                         |     |     |     |     |     |     |     |
| Allowable voltage fluctuation |         |    | -15% to 10%                           |     |     |     |     |     |     |     |
| Mains frequency               |         |    | 40 to 60 Hz                           |     |     |     |     |     |     |     |
| Efficiency η                  |         |    | 98%                                   |     |     |     |     |     |     |     |
| Degree of protection          |         |    | IP20                                  |     |     |     |     |     |     |     |
| Ambient humidity              |         |    | 85% RH or less (without condensation) |     |     |     |     |     |     |     |
| Storage temperature           |         |    | -25 to 55°C                           |     |     |     |     |     |     |     |
| Ambient temperature           |         |    | 5 to 40°C                             |     |     |     |     |     |     |     |

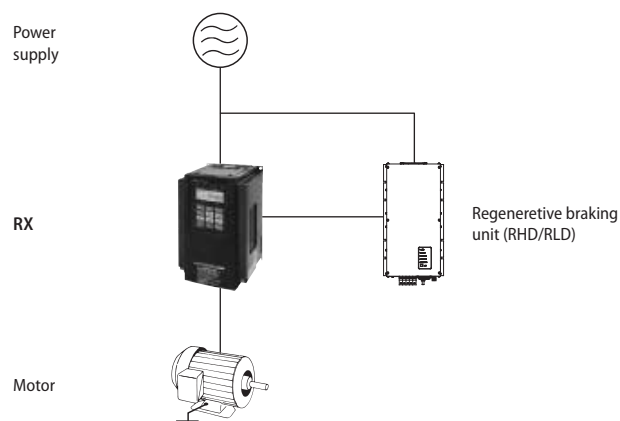
<sup>\*1</sup> At nominal voltage 400 V. 1 min in 10 min.

## Low harmonic filter

| Reference: RHF-RA_            |                            | 43                                    | 72  | 86  | 144 | 180 | 217   | 304 |
|-------------------------------|----------------------------|---------------------------------------|-----|-----|-----|-----|-------|-----|
| I <sub>RMS</sub> current A *1 | 100% AC                    | 43                                    | 72  | 86  | 144 | 180 | 217   | 304 |
|                               | 150% AC<br>1 min in 10 min | 64,5                                  | 108 | 129 | 216 | 270 | 325,5 | 456 |
| Heat loss W*1                 |                            | 242                                   | 352 | 374 | 488 | 692 | 743   | 905 |
| Allowable voltage fluctuation |                            | -15% to 10%                           |     |     |     |     |       |     |
| Power frequency               |                            | 50 Hz                                 |     |     |     |     |       |     |
| Efficiency η                  |                            | 98,5-99,5%                            |     |     |     |     |       |     |
| Degree of protection          |                            | IP20                                  |     |     |     |     |       |     |
| Ambient humidity              |                            | 85% RH or less (without condensation) |     |     |     |     |       |     |
| Storage temperature           |                            | -25 to 55°C                           |     |     |     |     |       |     |
| Ambient temperature           |                            | -20 to 45°C                           |     |     |     |     |       |     |

<sup>\*1</sup> At nominal voltage 400 V, 50 Hz.

## Regenerative Braking unit system



## Regenerative Braking unit for Low Duty applications (50%)

| Reference: RLD-E0_            | 8                                     | 12 | 16 | 20 | 24  | 32 | 40  | 48 | 58  | 80  | 95  | 116 | 140 | 170 | 200 |
|-------------------------------|---------------------------------------|----|----|----|-----|----|-----|----|-----|-----|-----|-----|-----|-----|-----|
| Max. regenerative power kW    | 8                                     | 12 | 16 | 20 | 24  | 32 | 40  | 48 | 58  | 80  | 95  | 116 | 140 | 170 | 200 |
| DC capacity $\mu\text{F}$     | 20                                    |    | 40 |    | 220 |    | 440 |    | 660 |     |     |     |     |     |     |
| Max. current A <sup>*1</sup>  | DC                                    | 14 | 20 | 28 | 35  | 42 | 55  | 70 | 83  | 101 | 139 | 165 | 202 | 242 | 348 |
|                               | AC                                    | 12 | 17 | 23 | 29  | 35 | 46  | 58 | 69  | 84  | 116 | 137 | 168 | 202 | 290 |
| Allowable voltage fluctuation | -15% to 10%                           |    |    |    |     |    |     |    |     |     |     |     |     |     |     |
| Mains frequency               | 50 to 60 Hz                           |    |    |    |     |    |     |    |     |     |     |     |     |     |     |
| Efficiency $\eta$             | 98%                                   |    |    |    |     |    |     |    |     |     |     |     |     |     |     |
| Degree of protection          | IP20                                  |    |    |    |     |    |     |    |     |     |     |     |     |     |     |
| Ambient humidity              | 85% RH or less (without condensation) |    |    |    |     |    |     |    |     |     |     |     |     |     |     |
| Storage temperature           | -25 to 55°C                           |    |    |    |     |    |     |    |     |     |     |     |     |     |     |
| Ambient temperature           | 5 to 40°C                             |    |    |    |     |    |     |    |     |     |     |     |     |     |     |

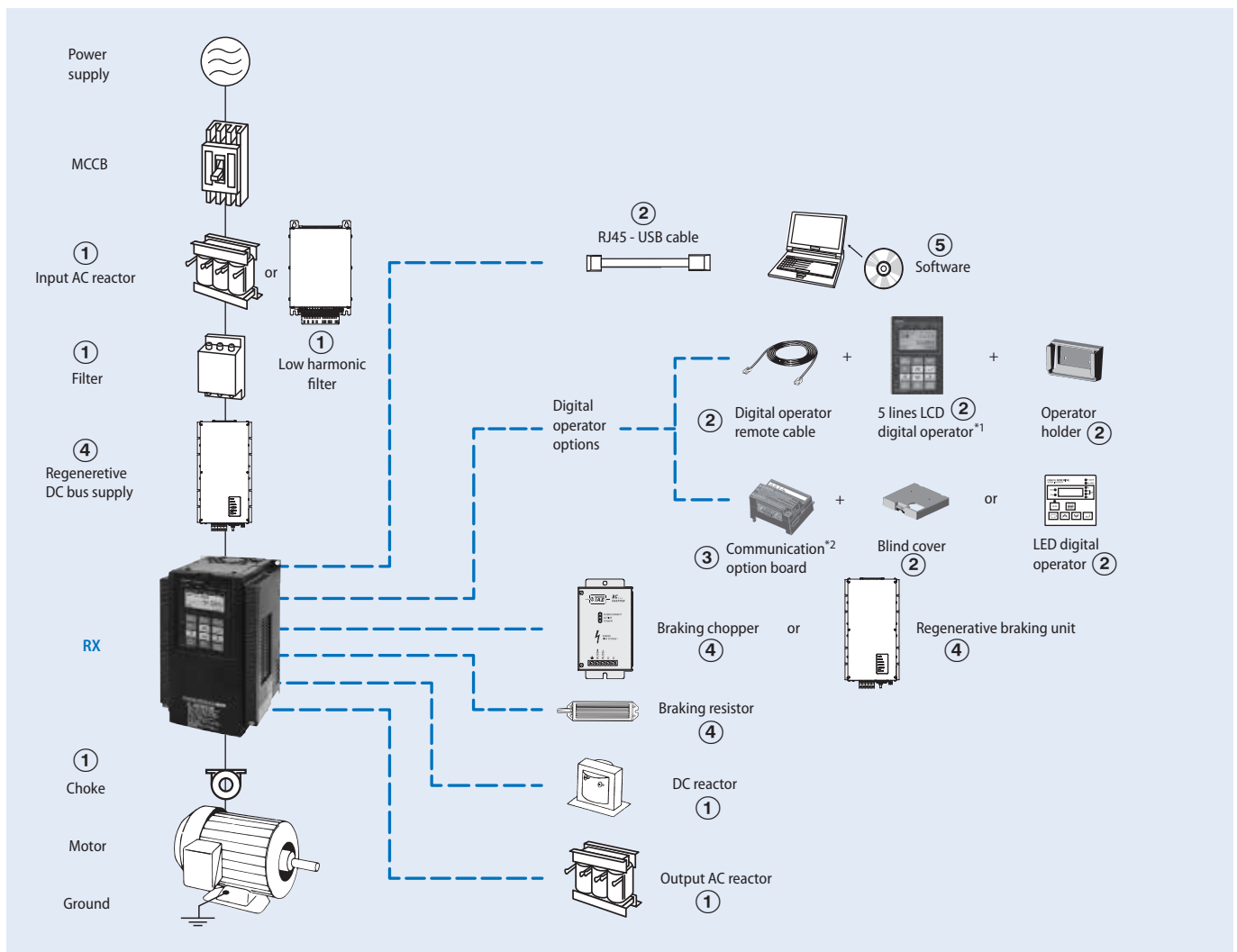
<sup>\*1</sup> At nominal voltage 400 V.

## Regenerative Braking unit for High Duty applications

| Reference: RHD-B0_            | 7                                     | 13 | 18  | 24 | 30 | 50 | 70  | 100 | 125 | 150 |
|-------------------------------|---------------------------------------|----|-----|----|----|----|-----|-----|-----|-----|
| Max. regenerative power kW    | 7                                     | 13 | 18  | 24 | 30 | 50 | 70  | 100 | 125 | 150 |
| DC capacity $\mu\text{F}$     | 20                                    |    | 100 |    | 40 |    | 220 |     | 660 |     |
| Max. current A <sup>*1</sup>  | DC I 100%                             | 12 | 23  | 31 | 42 | 52 | 87  | 122 | 174 | 260 |
|                               | AC I <sub>eff</sub> 100%              | 10 | 19  | 26 | 35 | 43 | 72  | 101 | 144 | 217 |
|                               | AC I <sub>eff</sub> 60 s in 10 min    | 12 | 23  | 31 | 42 | 52 | 86  | 121 | 173 | 260 |
| Allowable voltage fluctuation | -15% to 10%                           |    |     |    |    |    |     |     |     |     |
| Mains frequency               | 40 to 60 Hz                           |    |     |    |    |    |     |     |     |     |
| Efficiency $\eta$             | 98%                                   |    |     |    |    |    |     |     |     |     |
| Degree of protection          | IP20                                  |    |     |    |    |    |     |     |     |     |
| Ambient humidity              | 85% RH or less (without condensation) |    |     |    |    |    |     |     |     |     |
| Storage temperature           | -25 to 55°C                           |    |     |    |    |    |     |     |     |     |
| Ambient temperature           | 5 to 40°C                             |    |     |    |    |    |     |     |     |     |

<sup>\*1</sup> At nominal voltage 400 V.

## Ordering information



\*1 The 5 lines LCD digital operator is provided with the drive from factory.

\*2 When a communication option board is mounted, there are two options: mount a blind cover or a LED digital operator.

## 3G3RX drive

| Specifications       |                 |                 |                 |                 | Model           | Specifications       |                 |                 |                 |                 | Model           |                 |
|----------------------|-----------------|-----------------|-----------------|-----------------|-----------------|----------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Voltage              | Constant torque |                 | Variable torque |                 |                 | Voltage              | Constant torque |                 | Variable torque |                 |                 |                 |
|                      | Max motor kW    | Rated current A | Max motor kW    | Rated current A |                 |                      | Max motor kW    | Rated current A | Max motor kW    | Rated current A |                 |                 |
| Three-phase<br>200 V | 0.4             | 3.0             | 0.75            | 3.7             | 3G3RX-A2004-E1F | Three-phase<br>400 V | 0.4             | 1.5             | 0.75            | 1.9             | 3G3RX-A4004-E1F |                 |
|                      | 0.75            | 5.0             | 1.5             | 6.3             | 3G3RX-A2007-E1F |                      | 0.75            | 2.5             | 1.5             | 3.1             | 3G3RX-A4007-E1F |                 |
|                      | 1.5             | 7.5             | 2.2             | 9.4             | 3G3RX-A2015-E1F |                      | 1.5             | 3.8             | 2.2             | 4.8             | 3G3RX-A4015-E1F |                 |
|                      | 2.2             | 10.5            | 4.0             | 12              | 3G3RX-A2022-E1F |                      | 2.2             | 5.3             | 4.0             | 6.7             | 3G3RX-A4022-E1F |                 |
|                      | 4.0             | 16.5            | 5.5             | 19.6            | 3G3RX-A2037-E1F |                      | 4.0             | 9.0             | 5.5             | 11.1            | 3G3RX-A4040-E1F |                 |
|                      | 5.5             | 24              | 7.5             | 30              | 3G3RX-A2055-E1F |                      | 5.5             | 14              | 7.5             | 16              | 3G3RX-A4055-E1F |                 |
|                      | 7.5             | 32              | 11              | 44              | 3G3RX-A2075-E1F |                      | 7.5             | 19              | 11              | 22              | 3G3RX-A4075-E1F |                 |
|                      | 11              | 46              | 15              | 58              | 3G3RX-A2110-E1F |                      | 11              | 25              | 15              | 29              | 3G3RX-A4110-E1F |                 |
|                      | 15              | 64              | 18.5            | 73              | 3G3RX-A2150-E1F |                      | 15              | 32              | 18.5            | 37              | 3G3RX-A4150-E1F |                 |
|                      | 18.5            | 76              | 22              | 85              | 3G3RX-A2185-E1F |                      | 18.5            | 38              | 22              | 43              | 3G3RX-A4185-E1F |                 |
|                      | 22              | 95              | 30              | 113             | 3G3RX-A2220-E1F |                      | 22              | 48              | 30              | 57              | 3G3RX-A4220-E1F |                 |
|                      | 30              | 121             | 37              | 140             | 3G3RX-A2300-E1F |                      | 30              | 58              | 37              | 70              | 3G3RX-A4300-E1F |                 |
|                      | 37              | 145             | 45              | 169             | 3G3RX-A2370-E1F |                      | 37              | 75              | 45              | 85              | 3G3RX-A4370-E1F |                 |
|                      | 45              | 182             | 55              | 210             | 3G3RX-A2450-E1F |                      | 45              | 91              | 55              | 105             | 3G3RX-A4450-E1F |                 |
|                      | 55              | 220             | 75              | 270             | 3G3RX-A2550-E1F |                      | 55              | 112             | 75              | 135             | 3G3RX-A4550-E1F |                 |
|                      |                 |                 |                 |                 |                 |                      |                 | 75              | 149             | 90              | 160             | 3G3RX-B4750-E1F |
|                      |                 |                 |                 |                 |                 |                      |                 | 90              | 176             | 110             | 195             | 3G3RX-B4900-E1F |
|                      |                 |                 |                 |                 |                 |                      |                 | 110             | 217             | 132             | 230             | 3G3RX-B411K-E1F |
|                      |                 |                 |                 |                 |                 | 132                  | 260             | 160             | 290             | 3G3RX-B413K-E1F |                 |                 |

## ① Line filter

| Rasmi line filter             |               |                 |                 |             |                               |               |                 |                 |             |
|-------------------------------|---------------|-----------------|-----------------|-------------|-------------------------------|---------------|-----------------|-----------------|-------------|
| 3-phase 200 V                 |               |                 |                 |             | 3-phase 400 V                 |               |                 |                 |             |
| Model 3G3RX-__                | Model         | Rated current A | Leakage Nom/Max | Weight (kg) | Model 3G3RX-__                | Model         | Rated current A | Leakage Nom/Max | Weight (kg) |
| A2004/A2007/A2015/A2022/A2037 | AX-FIR2018-RE | 18              | 0.7/40 mA       | 2.0         | A4004/A4007/A4015/A4022/A4040 | AX-FIR3010-RE | 10              | 0.3/40 mA       | 1.9         |
| A2055/A2075/A2110             | AX-FIR2053-RE | 53              | 0.7/40 mA       | 2.5         | A4055/A4075/A4110             | AX-FIR3030-RE | 30              | 0.3/40 mA       | 2.2         |
| A2150/A2185/A2220             | AX-FIR2110-RE | 110             | 1.2/70 mA       | 8.0         | A4150/A4185/A4220             | AX-FIR3053-RE | 53              | 0.8/70 mA       | 4.5         |
| A2300                         | AX-FIR2145-RE | 145             | 1.2/70 mA       | 8.6         | A4300                         | AX-FIR3064-RE | 64              | 3/160 mA        | 7.0         |
| A2370/A2450                   | AX-FIR3250-RE | 250             | 6/300 mA        | 13.0        | A4370                         | AX-FIR3100-RE | 100             | 2/130 mA        | 8.0         |
| A2550                         | AX-FIR3320-RE | 320             | 6/300 mA        | 13.2        | A4450/A4550                   | AX-FIR3130-RE | 130             | 2/130 mA        | 8.6         |
|                               |               |                 |                 |             | B4750/B4900                   | AX-FIR3250-RE | 250             | 10/500 mA       | 13.0        |
|                               |               |                 |                 |             | B411K/B413K                   | AX-FIR3320-RE | 320             | 10/500 mA       | 13.2        |

## ① Input AC reactor

| 3-phase 200 V     |                   | 3-phase 400 V     |                   |
|-------------------|-------------------|-------------------|-------------------|
| Model 3G3RX-__    | Model             | Model 3G3RX-__    | Model             |
| A2004/A2007/A2015 | AX-RAI02800100-DE | A4004/A4007/A4015 | AX-RAI07700050-DE |
| A2022/A2037       | AX-RAI00880200-DE | A4022/A4040       | AX-RAI03500100-DE |
| A2055/A2075       | AX-RAI00350335-DE | A4055/A4075       | AX-RAI01300170-DE |
| A2110 /A2150      | AX-RAI00180670-DE | A4110/A4150       | AX-RAI00740335-DE |
| A2185/A2220       | AX-RAI00091000-DE | A4185/A4220       | AX-RAI00360500-DE |
| A2300/A2370       | AX-RAI00071550-DE | A4300/A4370       | AX-RAI00290780-DE |
| A2450/A2550       | AX-RAI00042300-DE | A4450/A4550       | AX-RAI00191150-DE |
|                   |                   | B4750/B4900       | AX-RAI00111850-DE |
|                   |                   | B411K/B413K       | AX-RAI00072700-DE |

## ① DC reactor

| 3-phase 200 V  |                  | 3-phase 400 V  |                  |
|----------------|------------------|----------------|------------------|
| Model 3G3RX-__ | Model            | Model 3G3RX-__ | Model            |
| A2004          | AX-RC10700032-DE | A4004          | AX-RC43000020-DE |
| A2007          | AX-RC06750061-DE | A4007          | AX-RC27000030-DE |
| A2015          | AX-RC03510093-DE | A4015          | AX-RC14000047-DE |
| A2022          | AX-RC02510138-DE | A4022          | AX-RC10100069-DE |
| A2037          | AX-RC01600223-DE | A4040          | AX-RC06400116-DE |
| A2055          | AX-RC01110309-DE | A4055          | AX-RC04410167-DE |
| A2075          | AX-RC00840437-DE | A4075          | AX-RC03350219-DE |
| A2110          | AX-RC00590614-DE | A4110          | AX-RC02330307-DE |
| A2150          | AX-RC00440859-DE | A4150          | AX-RC01750430-DE |
| A2185/A2220    | AX-RC00301275-DE | A4185/A4220    | AX-RC01200644-DE |
| A2300          | AX-RC00231662-DE | A4300          | AX-RC00920797-DE |
| A2370          | AX-RC00192015-DE | A4370          | AX-RC00741042-DE |
| A2450          | AX-RC00162500-DE | A4450          | AX-RC00611236-DE |
| A2500          | AX-RC00133057-DE | A4550          | AX-RC00501529-DE |
|                |                  | B4750          | AX-RC00372094-DE |
|                |                  | B4900          | AX-RC00312446-DE |
|                |                  | B411K          | AX-RC00252981-DE |
|                |                  | B413K          | AX-RC00213613-DE |

## ① Chokes

| Diameter | Description                | Model         |
|----------|----------------------------|---------------|
| 21       | For 2.2 kW motors or below | AX-FER2102-RE |
| 25       | For 15 kW motors or below  | AX-FER2515-RE |
| 50       | For 45 kW motors or below  | AX-FER5045-RE |
| 60       | For 55 kW motors or above  | AX-FER6055-RE |

## ① Output AC reactor

| 3-phase 200 V  |                   | 3-phase 400 V     |                   |
|----------------|-------------------|-------------------|-------------------|
| Model 3G3RX-__ | Model             | Model 3G3RX-__    | Model             |
| A2004          | AX-RAO11500026-DE | A4004/A4007/A4015 | AX-RAO16300038-DE |
| A2007          | AX-RAO07600042-DE |                   |                   |
| A2015          | AX-RAO04100075-DE |                   |                   |
| A2022          | AX-RAO03000105-DE |                   |                   |
| A2037          | AX-RAO01830160-DE | A4022             | AX-RAO11800053-DE |
| A2055          | AX-RAO01150220-DE | A4040             | AX-RAO07300080-DE |
| A2075          | AX-RAO00950320-DE | A4055             | AX-RAO04600110-DE |
| A2110          | AX-RAO00630430-DE | A4075             | AX-RAO03600160-DE |
| A2150          | AX-RAO00490640-DE | A4110             | AX-RAO02500220-DE |
| A2185          | AX-RAO00390800-DE | A4150             | AX-RAO02000320-DE |
| A2220          | AX-RAO00330950-DE | A4185             | AX-RAO01650400-DE |
| A2300          | AX-RAO00251210-DE | A4220             | AX-RAO01300480-DE |
| A2370          | AX-RAO00191450-DE | A4300             | AX-RAO01030580-DE |
| A2450          | AX-RAO00161820-DE | A4370             | AX-RAO00800750-DE |
| A2500          | AX-RAO00132200-DE | A4450             | AX-RAO00680900-DE |
|                |                   | A4550             | AX-RAO00531100-DE |
|                |                   | B4750             | AX-RAO00401490-DE |
|                |                   | B4900             | AX-RAO00331760-DE |
|                |                   | B411K             | AX-RAO00262170-DE |
|                |                   | B413K             | AX-RAO00212600-DE |

**Note:** This table corresponds with HD rating. When ND is used, please choose the reactor for the next size drive.

## ② Accessories

| Type                    | Appearance                                                                          | Description                                                  | Model              |
|-------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------|--------------------|
| Remote digital operator |   | 5 Line LCD digital operator with copy function <sup>*1</sup> | 3G3AX-OP05         |
|                         |                                                                                     | Operator holder (for inside cabinet mounting)                | 3G3AX-OP05-H-E     |
|                         |  | LED remote digital operator                                  | 3G3AX-OP01         |
|                         |                                                                                     | Mounting kit                                                 | 4X-KITmini         |
| LED digital operator    |  | To be used in combination with communication option boards   | 3G3AX-OP03         |
| Blind cover             |  |                                                              | 3G3AX-OP05-B-E     |
| Cables                  |  | 3 m remote digital operator cable                            | 3G3AX-CAJOP300-EE  |
|                         |                                                                                     | RJ45 to USB connection cable                                 | USB-CONVERTERCABLE |
|                         |                                                                                     |                                                              | 3G3AX-PCACN2       |

<sup>\*1</sup> This digital operator is provided with the RX drive from factory.

## ③ Option board

| Type                       | Description                     | Function                                                                                                                                                                      | Model           |
|----------------------------|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| Encoder feedback           | PG speed controller option card | Phase A,B and Z pulse (differential pulse) inputs (RS-422)<br>Pulse train position command input (RS-422)<br>Pulse monitor output (RS-422)<br>PG frequency range: 100 kHz max | 3G3AX-PG        |
| Communication option board | DeviceNet option card           | Used for running or stopping the drive, setting or referencing parameters, and monitoring output frequency, output current... through communications with the host controller | 3G3AX-RX-DRT    |
|                            | PROFIBUS option card            |                                                                                                                                                                               | 3G3AX-RX-PRT    |
|                            | EtherCAT option card            |                                                                                                                                                                               | 3G3AX-RX-ECT    |
|                            | CompoNet option card            |                                                                                                                                                                               | 3G3AX-RX-CRT    |
|                            | MECHATROLINK-II option card     |                                                                                                                                                                               | 3G3AX-RX-MRT    |
| I/O option                 | Extra input/output option card  | 8 digital inputs, 8 digital outputs, 4 analog inputs, 1 analog output                                                                                                         | 3G3AX-EIO21-ROE |

## ④ DC Supply with Regenerative Active Front End

| Max. input power kW | Stand-alone                 |                            |               | Kit                          |
|---------------------|-----------------------------|----------------------------|---------------|------------------------------|
|                     | Regenerative DC bus supply  | Low harmonic filter        | EMC filter    |                              |
| 30                  | RFE-B3 30-400-50-230-A-RVE  | RHF-RA 43-400-50-20-A-RVE  | RFI-RA 12-RVE | RFE-B3 30-400-50-230-IF-RVE  |
| 45                  | RFE-B3 45-400-50-230-A-RVE  | RHF-RA 72-400-50-20-A-RVE  |               | RFE-B3 45-400-50-230-IF-RVE  |
| 60                  | RFE-B3 60-400-50-230-A-RVE  | RHF-RA 86-400-50-20-A-RVE  | RFI-RA 23-RVE | RFE-B3 60-400-50-230-IF-RVE  |
| 80                  | RFE-B3 80-400-50-230-A-RVE  | RHF-RA 144-400-50-20-A-RVE |               | RFE-B3 80-400-50-230-IF-RVE  |
| 100                 | RFE-B3 100-400-50-230-A-RVE |                            | RFI-RA X5-RVE | RFE-B3 100-400-50-230-IF-RVE |
| 125                 | RFE-B3 125-400-50-230-A-RVE | RHF-RA 180-400-50-20-A-RVE |               | RFE-B3 125-400-50-230-IF-RVE |
| 150                 | RFE-B3 150-400-50-230-A-RVE | RHF-RA 217-400-50-20-A-RVE | RFI-RA X6-RVE | RFE-B3 150-400-50-230-IF-RVE |
| 200                 | RFE-B3 200-400-50-230-A-RVE | RHF-RA 304-400-50-20-A-RVE |               | RFE-B3 200-400-50-230-IF-RVE |

**Note:** The DC Supply with Regenerative Active Front End kit includes a Regenerative DC bus supply, low harmonic filter and EMC filter.

## ④ Regenerative Braking unit

| Low Duty applications (50%) |                             | High Duty applications     |                             |
|-----------------------------|-----------------------------|----------------------------|-----------------------------|
| Max. regenerative power kW  | Regenerative braking unit   | Max. regenerative power kW | Regenerative braking unit   |
| 8                           | RLD-E0 8-400-50-0-A-RVE     | 7                          | RHD-B0 7-400-50-0-A-RVE     |
| 12                          | RLD-E0 12-400-50-0-A-RVE    | 13                         | RHD-B0 13-400-50-0-A-RVE    |
| 16                          | RLD-E0 16-400-50-0-A-RVE    | 18                         | RHD-B0 18-400-50-0-A-RVE    |
| 20                          | RLD-E0 20-400-50-0-A-RVE    | 24                         | RHD-B0 24-400-50-0-A-RVE    |
| 24                          | RLD-E0 24-400-50-0-A-RVE    | 30                         | RHD-B0 30-400-50-230-A-RVE  |
| 32                          | RLD-E0 32-400-50-0-A-RVE    | 50                         | RHD-B0 50-400-50-230-A-RVE  |
| 40                          | RLD-E0 40-400-50-0-A-RVE    | 70                         | RHD-B0 70-400-50-230-A-RVE  |
| 48                          | RLD-E0 48-400-50-0-A-RVE    | 100                        | RHD-B0 100-400-50-230-A-RVE |
| 58                          | RLD-E0 58-400-50-0-A-RVE    | 125                        | RHD-B0 125-400-50-230-A-RVE |
| 80                          | RLD-E0 80-400-50-0-A-RVE    | 150                        | RHD-B0 150-400-50-230-A-RVE |
| 95                          | RLD-E0 95-400-50-0-A-RVE    |                            |                             |
| 116                         | RLD-E0 116-400-50-0-A-RVE   |                            |                             |
| 140                         | RLD-E0 140-400-50-0-A-RVE   |                            |                             |
| 170                         | RLD-E0 170-400-50-230-A-RVE |                            |                             |
| 200                         | RLD-E0 200-400-50-230-A-RVE |                            |                             |

## ④ Braking unit, braking resistor unit

| Drive                                   |               |                         |                          |                                | Braking resistor unit                    |            |                     |                                                                             |            |                     |
|-----------------------------------------|---------------|-------------------------|--------------------------|--------------------------------|------------------------------------------|------------|---------------------|-----------------------------------------------------------------------------|------------|---------------------|
| Voltage                                 | Max. motor kW | Model 3G3RX-<br>3-phase | Braking unit AX-<br>BCR_ | Connectable<br>min. resistance | Drive mounted type<br>(3%ED, 10 sec max) |            | Braking<br>torque % | External resistor 10%ED, 10 sec max<br>for built-in, 5 sec for braking unit |            | Braking<br>torque % |
|                                         |               |                         |                          |                                | Type AX-__                               | Resistance |                     | Type AX-__                                                                  | Resistance |                     |
| 200 V<br>(single-phase/<br>three-phase) | 0.55          | A2004                   | Built-in                 | 50 Ω                           | REM00K1200-IE                            | 200 Ω      | 180                 | REM00K1200-IE                                                               | 200 Ω      | 180                 |
|                                         | 1.1           | A2007                   |                          |                                |                                          |            | 100                 | REM00K2070-IE                                                               | 70 Ω       | 200                 |
|                                         | 1.5           | A2015                   |                          | 35 Ω                           | REM00K2070-IE                            | 70 Ω       | 140                 | REM00K4075-IE                                                               | 75 Ω       | 130                 |
|                                         | 2.2           | A2022                   |                          |                                |                                          |            | 90                  | REM00K4035-IE                                                               | 35 Ω       | 180                 |
|                                         | 4.0           | A2037                   |                          |                                | REM00K4075-IE                            | 75 Ω       | 50                  | REM00K6035-IE                                                               |            | 100                 |
|                                         | 5.5           | A2055                   |                          | 16 Ω                           | REM00K4035-IE                            | 35 Ω       | 75                  | REM00K9020-IE                                                               | 20 Ω       | 150                 |
|                                         | 7.5           | A2075                   |                          | 10 Ω                           |                                          |            | 55                  | REM01K9017-IE                                                               | 17 Ω       | 110                 |
|                                         | 11.0          | A2110                   |                          |                                | REM00K6035-IE                            |            | 40                  | REM02K1017-IE                                                               |            | 75                  |
|                                         | 15.0          | A2150                   |                          | 7.5 Ω                          | REM00K9017-IE                            | 17 Ω       | 55                  | REM03K5010-IE                                                               | 10 Ω       | 95                  |
|                                         | 18.5          | A2185                   |                          |                                | REM03K5010-IE                            | 10 Ω       | 75                  | REM19K0008-IE                                                               | 8 Ω        | 95                  |
|                                         | 22.0          | A2220                   |                          | 5 Ω                            |                                          |            | 65                  |                                                                             |            | 80                  |
|                                         | 30.0          | A2300                   | 2035090-TE               | 4 Ω                            |                                          |            |                     | REM19K0006-IE                                                               | 6 Ω        | 80                  |
|                                         | 37.0          | A2370                   | 2070130-TE               | 2.8 Ω                          |                                          |            |                     |                                                                             |            | 60                  |
|                                         | 45.0          | A2450                   |                          |                                |                                          |            |                     | 2 × REM19K0006-IE                                                           | 3 Ω        | 105                 |
|                                         | 55.0          | A2550                   |                          |                                |                                          |            |                     |                                                                             |            | 85                  |
| 400 V<br>(three-phase)                  | 0.55          | A4004                   | Built-in                 | 100 Ω                          | REM00K1400-IE                            | 400 Ω      | 200                 | REM00K1400-IE                                                               | 400 Ω      | 200                 |
|                                         | 1.1           | A4007                   |                          |                                |                                          |            | 200                 |                                                                             |            | 200                 |
|                                         | 1.5           | A4015                   |                          |                                | REM00K1200-IE                            | 200 Ω      | 190                 | REM00K2200-IE                                                               | 200 Ω      | 190                 |
|                                         | 2.2           | A4022                   |                          | 70 Ω                           | REM00K2200-IE                            |            | 130                 | REM00K5120-IE                                                               | 120 Ω      | 200                 |
|                                         | 4.0           | A4040                   |                          |                                | REM00K2120-IE                            | 120 Ω      | 120                 | REM00K6100-IE                                                               | 100 Ω      | 140                 |
|                                         | 5.5           | A4055                   |                          |                                | REM00K4075-IE                            | 75 Ω       | 140                 | REM00K9070-IE                                                               | 70 Ω       | 150                 |
|                                         | 7.5           | A4075                   |                          | 35 Ω                           |                                          |            | 100                 | REM01K9070-IE                                                               |            | 110                 |
|                                         | 11.0          | A4110                   |                          |                                | REM00K6100-IE                            | 100 Ω      | 50                  | REM02K1070-IE                                                               |            | 75                  |
|                                         | 15.0          | A4150                   |                          | 24 Ω                           | REM00K9070-IE                            | 70 Ω       | 55                  | REM03K5035-IE                                                               | 35 Ω       | 110                 |
|                                         | 18.5          | A4185                   |                          |                                | REM03K5035-IE                            | 35 Ω       | 90                  | REM19K0030-IE                                                               | 30 Ω       | 100                 |
|                                         | 22.0          | A4220                   | 4015045-TE               | 20 Ω                           |                                          |            | 75                  |                                                                             |            | 85                  |
|                                         | 30.0          | A4300                   |                          | 16 Ω                           |                                          |            |                     | REM19K0020-IE                                                               | 20 Ω       | 95                  |
|                                         | 37.0          | A4370                   | 4017068-TE               | 11 Ω                           |                                          |            |                     | REM38K0012-IE                                                               | 15 Ω       | 125                 |
|                                         | 45.0          | A4450                   | 4035090-TE               | 8.5 Ω                          |                                          |            |                     |                                                                             |            | 100                 |
|                                         | 55.0          | A4550                   |                          |                                |                                          |            |                     | 2 × REM19K0020-IE                                                           | 10 Ω       | 100                 |
|                                         | 75.0          | B4750                   |                          |                                |                                          |            |                     | 3 × REM19K0030-IE                                                           |            | 75                  |
|                                         | 90.0          | B4900                   | 4070130-TE               | 5.5 Ω                          |                                          |            |                     | 2 × REM38K0012-IE                                                           | 6 Ω        | 105                 |
|                                         | 110.0         | B411K                   | 4090240-TE               | 3.2 Ω                          |                                          |            |                     | 3 × REM38K0012-IE                                                           | 4 Ω        | 125                 |
|                                         | 132.0         | B413K                   |                          |                                |                                          |            |                     |                                                                             |            | 105                 |

## ⑤ Computer software

| Type              | Description                                 | Model    |
|-------------------|---------------------------------------------|----------|
| Computer software | Configuration and monitoring software tool  | CX-Drive |
|                   |                                             | CX-One   |
|                   | Software tool for energy saving calculation | €Saver   |

ALL DIMENSIONS SHOWN ARE IN MILLIMETERS.

To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.