

3G3M1

Variable Speed Drives

Premium features in compact size

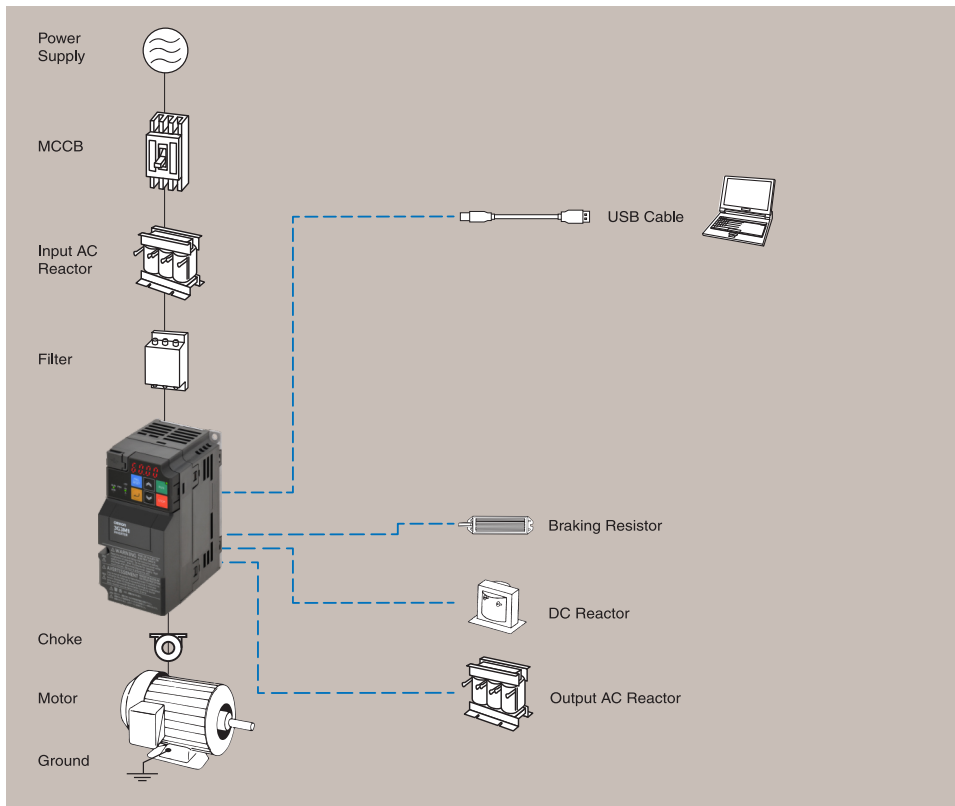
- IM and PM motor control in OLV & CLV (200% torque at 0Hz).
- Multiple ratings: HHD 150%/1 min and HND 120%/1 min.
- 590 Hz max Output frequency
- Torque control for IM in OLV/CLV, PM in CLV.
- Speed, Position and Gear function.
- Built-in 1 encoder / pulse counter input.
- Safe Stop 0 (STO SIL3 PLe)
- USB programming port.
- Modbus RS-485
- Program download without power supply
- Predictive maintenance drive parameters.
- Energy saving dedicated functionality.
- PC configuration tool: Sysmac Studio IDE
- Coated PCB for dust and moisture resistance.
- 10 years 24/7 Maintenance Free operation
- CE,UKCA, cULus, KC, RCM and RoHS.

Ratings:

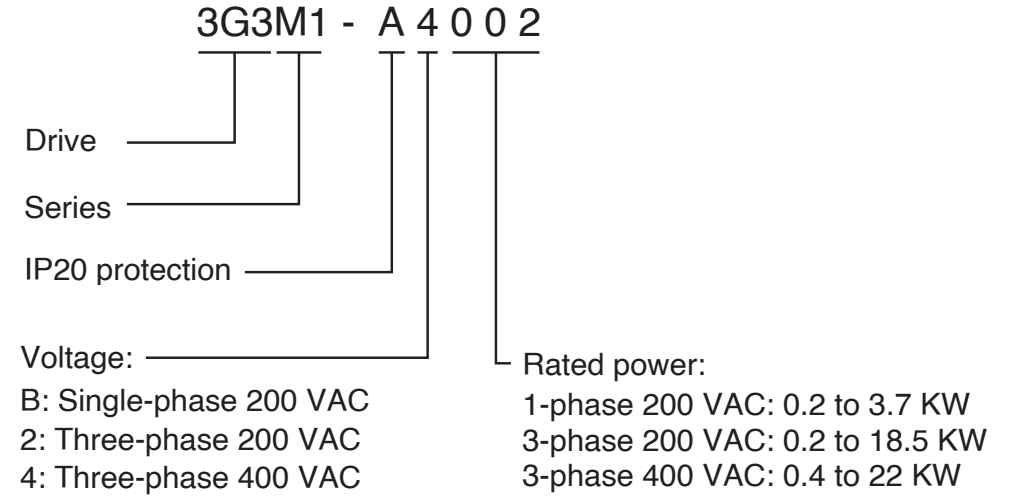
| | |
|--------------------------|----------------|
| 200 V Class single-phase | 0.2 to 3.7 KW |
| 200 V Class three-phase | 0.2 to 18.5 KW |
| 400 V Class three-phase | 0.4 to 22 KW |



System configuration



Type designation



Specifications

| Single-phase 200V: 3G3M1-A@ | | Duty rating | B002 | B004 | B007 | B015 | B022 | B037 |
|-------------------------------------|--|-------------------------------------|---|------|------|------|-------|------|
| Max. Applicable motor output (kW) | | HHD | 0.2 | 0.4 | 0.75 | 1.5 | 2.2 | 3.7 |
| | | HND | 0.4 | 0.55 | 1.1 | 2.0 | 2.7 | - |
| Output characteristics | Drive capacity (kVA) 200V | HHD | 0.6 | 1 | 1.7 | 2.8 | 3.8 | 6.1 |
| | | HND | 0.7 | 1.2 | 2.1 | 3.3 | 4.2 | - |
| | Drive capacity (kVA) 240V | HHD | 0.7 | 1.2 | 2.1 | 3.3 | 4.6 | 7.3 |
| | | HND | 0.8 | 1.5 | 2.5 | 4.0 | 5.0 | - |
| | Rated output current (A) | HHD | 1.6 | 3.0 | 5.0 | 8.0 | 11.0 | 17.5 |
| | | HND | 1.9 | 3.5* | 6.0* | 9.6* | 12.0* | - |
| | Overload tolerance | HHD HND | 150% of the rated output current for 60 seconds or 200% 0.5s 120% of the rated output current for 60 seconds | | | | | |
| | Carrier frequency (no-derating) | HHD HND | 4 kHz 8 kHz | | | | | |
| Max. Output voltage | - | Three-phase 200 to 240 V (with AVR) | | | | | | |
| Max. Output frequency | - | 590.0 Hz | | | | | | |
| Input characteristics | Rated voltage and frequency | - | 1-phase AC power supply 200-240 V at 50/60 Hz | | | | | |
| | Allowable voltage fluctuation | - | -15% to 10% | | | | | |
| | Allowable frequency fluctuation | - | ±5% | | | | | |
| | Rated input current | HHD | 3.3 | 5.4 | 9.7 | 16.4 | 22.0 | 45.4 |
| HND | | 4.9 | 7.3 | 13.8 | 20.2 | 26.0 | - | |
| Rated Input current with DC reactor | HHD | 2.0 | 3.5 | 6.4 | 11.6 | 17.5 | 31.8 | |
| | HND | 3.7 | 4.6 | 9.4 | 17.9 | 25.0 | - | |
| Rated power capacity | HHD | 0.4 | 0.7 | 1.3 | 2.4 | 3.5 | 6.4 | |
| | HND | 0.8 | 1.0 | 1.9 | 3.6 | 5.5 | - | |
| Braking | Natural deceleration braking torque (%) without resistor | HHD | 150 | 100 | 70 | 40 | | |
| | | HND | 75 | 73 | 68 | 48 | 29 | - |
| | Minimum connectable resistor (Ohms) | - | 100 | | | 40 | | |
| Weight (kg) | | - | 0.5 | 0.6 | 0.9 | 1.4 | 1.7 | 3.8 |

* Values for 40°C ambient temperature

Note “Applicable motor” represents standard three phase motors.

When using other types of motors, make sure that the rated current of the motor does not exceed that of the inverter output voltage cannot exceed the power supply voltage.

For higher carrier frequency confirm with carrier derating tables in the manual the value is calculated assuming that the inverter is connected with a power supply with the capacity of 500 kVA (or 10 times the inverter capacity if the inverter capacity exceeds 50 kVA) and %X is 5%

| 3-phase 200V: 3G3M1-A_ | | Duty rating | 2002 | 2004 | 2007 | 2015 | 2022 | 2037 | 2055 | 2075 | 2110 | 2150 | 2185 |
|-------------------------------------|--|-------------|--|------|------|------|-------|------|------|------|------|------|------|
| Max. Applicable motor output (kW) | HHD | 0.2 | 0.4 | 0.75 | 1.5 | 2.2 | 3.7 | 5.5 | 7.5 | 11 | 15 | 18.5 | |
| | HND | 0.4 | 0.75 | 1.1 | 2.2 | 3.0 | 5.5 | 7.5 | 11 | 15 | 18.5 | 22 | |
| Output characteristics | Drive capacity (kVA) 200V | HHD | 0.6 | 1.0 | 1.7 | 2.8 | 3.8 | 6.1 | 8.7 | 11 | 16 | 21 | 26 |
| | | HND | 0.7 | 1.2 | 2.1 | 3.3 | 4.2 | 6.8 | 10 | 14 | 19 | 24 | 30 |
| | Drive capacity (kVA) 240V | HHD | 0.7 | 1.2 | 2.1 | 3.3 | 4.6 | 7.3 | 10 | 14 | 20 | 25 | 32 |
| | | HND | 0.8 | 1.5 | 2.5 | 4.0 | 5.0 | 8.1 | 12 | 17 | 23 | 29 | 37 |
| Rated output current (A) | HHD | 1.6 | 3.0 | 5.0 | 8.0 | 11 | 17.5 | 25 | 33 | 47 | 60 | 76 | |
| | HND | 2.0 | 3.5 | 6.0 | 9.6 | 12* | 19.6* | 30 | 40 | 56 | 69 | 88 | |
| Overload tolerance | | HHD HND | 150% of the rated output current for 60 seconds or 200% 0.5s 120% of the rated output current for 60 seconds | | | | | | | | | | |
| Carrier frequency (no-derating) | | HHD HND | 4 kHz 8 kHz | | | | | | | | | | |
| Max. Output voltage | | - | Three-phase 200 to 240 V (with AVR) | | | | | | | | | | |
| Max. Output frequency | | - | 590.0 Hz | | | | | | | | | | |
| Rated voltage and frequency | | - | 3-phase AC power supply 200-240 V at 50/60 Hz | | | | | | | | | | |
| Allowable voltage fluctuation | | - | -15% to 10% | | | | | | | | | | |
| Allowable frequency fluctuation | | - | ±5% | | | | | | | | | | |
| Input characteristics | Rated input current | HHD | 1.8 | 3.1 | 5.3 | 9.5 | 13.2 | 22.2 | 31.5 | 42.7 | 60.7 | 80 | 97 |
| | | HND | 2.6 | 4.9 | 6.7 | 12.8 | 17.9 | 28.5 | 42.7 | 60.7 | 80 | 97 | 112 |
| | Rated Input current with DC reactor | HHD | 0.93 | 1.6 | 3.0 | 5.7 | 8.3 | 14.0 | 21.1 | 28.8 | 42.2 | 57.6 | 71.0 |
| | | HND | 1.6 | 3.0 | 4.3 | 8.3 | 11.7 | 19.9 | 28.8 | 42.2 | 57.6 | 71.0 | 84.4 |
| | Rated power capacity | HHD | 0.4 | 0.6 | 1.1 | 2.0 | 2.9 | 4.9 | 7.0 | 10 | 15 | 20 | 25 |
| | | HND | 0.6 | 1.1 | 1.5 | 2.9 | 4.1 | 6.9 | 10 | 15 | 20 | 25 | 30 |
| Braking | Natural deceleration braking torque (%) without resistor | HHD | 150 | 100 | | 70 | 40 | | 20 | | | | |
| | | HND | 75 | 53 | 68 | 48 | 29 | 27 | 15 | | | | |
| Minimum connectable resistor (Ohms) | | - | 100 | | | 40 | | 33 | 20 | 15 | 10 | 8.6 | 4 |
| Weight (kg) | | - | 0.5 | 0.6 | 0.8 | 1.4 | 1.4 | 1.7 | 3.8 | 4 | 5.3 | 5.4 | 11 |

* Values for 40°C ambient temperature

Note “Applicable motor” represents standard three phase motors.
 When using other types of motors, make sure that the rated current of the motor does not exceed that of the inverter output voltage cannot exceed the power supply voltage.
 For higher carrier frequency confirm with carrier derating tables in the manual the value is calculated assuming that the inverter is connected with a power supply with the capacity of 500 kVA (or 10 times the inverter capacity if the inverter capacity exceeds 50 kVA) and %X is 5%

| 3-phase 400 V: 3G3M1-A_-ECT | | Duty rating | 4004 | 4007 | 4015 | 4022 | 4030 | 4040 | 4055 | 4075 | 4110 | 4150 | 4185 | 4220 |
|--|--|-------------|---|------|------|------|------|------|------|------|------|------|------|------|
| Max. Applicable motor output (kW) | | HD | 0.75 | 1.1 | 2.2 | 3.0 | 4.0 | 5.5 | 7.5 | 11.0 | 15.0 | 18.5 | 22.0 | 30.0 |
| | | ND | 0.75 | 1.5 | 2.2 | 3.0 | 4.0 | 5.5 | 11.0 | 15.0 | 18.5 | 22.0 | 30.0 | 37.0 |
| | | HHD | 0.4 | 0.75 | 1.5 | 2.2 | 3.0 | 4.0 | 5.5 | 7.5 | 11.0 | 15.0 | 18.5 | 22.0 |
| | | HND | 0.75 | 1.1 | 2.2 | 3.0* | 4.0 | 5.5* | 7.5 | 11.0 | 15.0 | 18.5 | 22.0 | 30.0 |
| Drive capacity (kVA) 380V | | HD | 1.2 | 2.2 | 3.3 | 4.1 | 5.8 | 7.3 | 12.0 | 15.0 | 20.0 | 25.0 | 30.0 | 39.9 |
| | | ND | 1.4 | 2.7 | 3.6 | 4.5 | 6.1 | 7.9 | 14.0 | 19.0 | 24.0 | 29.0 | 39.0 | 47.0 |
| | | HHD | 1.2 | 2.2 | 3.2 | 3.6 | 4.7 | 6.1 | 9.7 | 12.0 | 16.0 | 20.0 | 26.0 | 30.0 |
| | | HND | 1.4 | 2.7 | 3.6 | 4.5 | 5.8 | 7.3 | 12.0 | 15.0 | 20.0 | 25.0 | 30.0 | 39.0 |
| Drive capacity (kVA) 480V | | HD | 1.5 | 2.8 | 4.2 | 5.2 | 7.3 | 9.2 | 15.0 | 19.0 | 26.0 | 32.0 | 37.0 | 50.0 |
| | | ND | 1.7 | 3.4 | 4.6 | 5.7 | 7.6 | 10.0 | 18.0 | 24.0 | 31.0 | 37.0 | 49.0 | 60.0 |
| | | HHD | 1.5 | 2.8 | 4.0 | 4.6 | 6.0 | 7.6 | 12.3 | 15.0 | 20.0 | 26.0 | 32.0 | 37.0 |
| | | HND | 1.7 | 3.4 | 4.6 | 5.7 | 7.3 | 9.2 | 15.0 | 19.0 | 26.0 | 32.0 | 37.0 | 50.0 |
| Rated output current (A) | | HD | 1.8 | 3.4 | 5.0 | 6.3 | 8.6 | 11.1 | 17.5 | 23.0 | 31.0 | 38.0 | 45.0 | 60.0 |
| | | ND | 2.1 | 4.1 | 5.5 | 6.9 | 9.2 | 12.0 | 21.5 | 28.5 | 37.0 | 44.0 | 59.0 | 72.0 |
| | | HHD | 1.8 | 3.4 | 4.8 | 5.5 | 7.2 | 9.2 | 14.8 | 18.0 | 24.0 | 31.0 | 39.0 | 45.0 |
| | | HND | 2.1 | 4.1 | 5.5 | 6.9 | 8.8 | 11.1 | 17.5 | 23.0 | 31.0 | 38.0 | 45.0 | 60.0 |
| Overload tolerance | | HHD HND | 150% of the rated output current for 60 seconds or 200% 0.5s, 120% of the rated output current for 60 seconds | | | | | | | | | | | |
| Carrier frequency (no-derating) | | HHD HND | 4 kHz 8 kHz | | | | | | | | | | | |
| Max. Output voltage | | | Proportional to input voltage: 380 - 480 V | | | | | | | | | | | |
| Max. Output frequency | | | 590.0 Hz | | | | | | | | | | | |
| Rated voltage and frequency | | - | 3-phase AC power supply 380-480 V at 50/60 Hz | | | | | | | | | | | |
| Allowable voltage fluctuation | | | -15% to 10% | | | | | | | | | | | |
| Allowable frequency fluctuation | | | ±5% | | | | | | | | | | | |
| Rated input current | | HD | 2.7 | 3.9 | 7.3 | 11.3 | 14.2 | 16.8 | 23.2 | 33.0 | 43.8 | 52.3 | 60.6 | 77.9 |
| | | ND | 2.7 | 4.8 | 7.3 | 11.3 | 14.2 | 16.8 | 33.0 | 43.8 | 52.3 | 60.6 | 77.9 | 94.3 |
| | | HHD | 1.7 | 3.1 | 5.9 | 8.2 | 11.3 | 14.2 | 17.3 | 23.2 | 33.0 | 43.8 | 52.3 | 60.6 |
| | | HND | 2.7 | 3.9 | 7.3 | 11.3 | 14.2 | 16.8 | 23.2 | 33.0 | 43.8 | 52.3 | 60.6 | 77.9 |
| Rated Input current with DC reactor | | HD | 1.5 | 2.1 | 4.2 | 5.6 | 7.7 | 10.1 | 14.4 | 21.1 | 28.8 | 35.5 | 42.2 | 57.0 |
| | | ND | 1.5 | 2.9 | 4.2 | 5.8 | 7.7 | 10.1 | 21.1 | 28.8 | 35.5 | 42.2 | 57.0 | 68.5 |
| | | HHD | 0.85 | 1.6 | 3.0 | 4.4 | 5.8 | 7.7 | 10.6 | 14.4 | 21.1 | 28.8 | 35.5 | 42.2 |
| | | HND | 1.5 | 2.1 | 4.2 | 5.8 | 7.7 | 10.1 | 14.4 | 21.1 | 28.8 | 35.5 | 42.2 | 57.0 |
| Rated power capacity | | HD | 1.1 | 1.5 | 3.0 | 4.1 | 5.4 | 7.0 | 10.0 | 15.0 | 20.0 | 29.0 | 39.0 | 47.0 |
| | | ND | 1.1 | 2.1 | 3.0 | 4.1 | 5.4 | 7.0 | 15.0 | 20.0 | 25.0 | 29.0 | 39.0 | 47.0 |
| | | HHD | 0.6 | 1.2 | 2.1 | 3.1 | 4.1 | 5.4 | 7.3 | 10.0 | 15.0 | 20.0 | 25.0 | 29.0 |
| | | HND | 1.1 | 1.5 | 3.0 | 4.1 | 5.4 | 7.0 | 10.0 | 15.0 | 20.0 | 25.0 | 29.0 | 39.0 |
| Natural deceleration braking torque (%) without resistor | | HD | 53 | 68 | 48 | 29 | 27 | 15 | | | | | | |
| | | ND | 53 | 50 | 48 | 29 | 27 | 12 | | | | | | |
| | | HHD | 100 | | 70 | 40 | 40 | 20 | | | | | | |
| | | HND | 53 | 68 | 48 | 29 | 27 | 15 | | | | | | |
| Minimum connectable resistor (Ohms) | | - | 200 | | 160 | | 130 | | 80 | 60 | 40 | 34.4 | 16 | |
| Weight (kg) | | - | 1.2 | 1.4 | 1.5 | 1.4 | 1.8 | 1.8 | 3.7 | 3.8 | 5.3 | 5.4 | 11 | 11 |

* Values for 40°C ambient temperature

Note "Applicable motor" represents standard three phase motors.

When using other types of motors, make sure that the rated current of the motor does not exceed that of the inverter output voltage cannot exceed the power supply voltage.

For higher carrier frequency confirm with carrier derating tables in the manual the value is calculated assuming that the inverter is connected with a power supply with the capacity of 500 kVA (or 10 times the inverter capacity if the inverter capacity exceeds 50 kVA) and %X is 5%

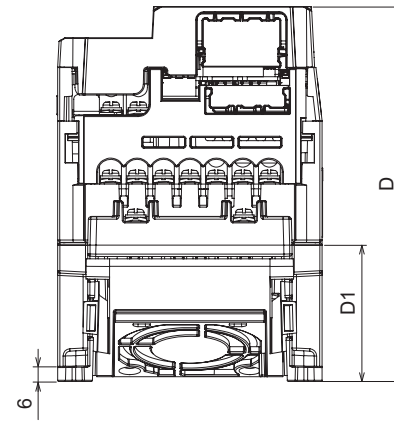
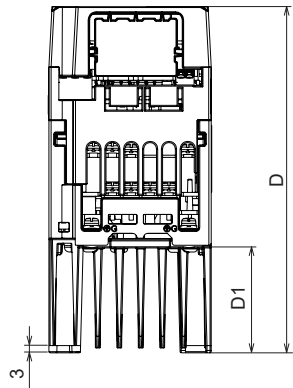
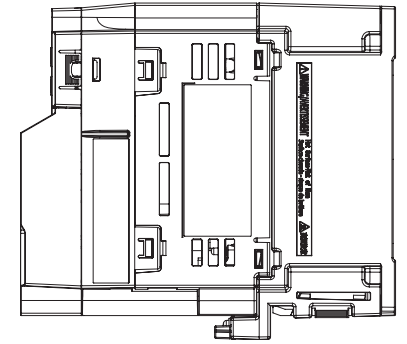
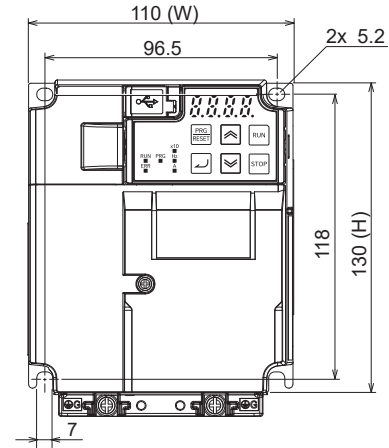
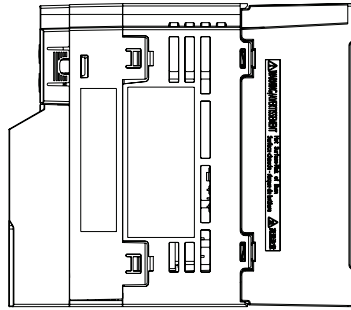
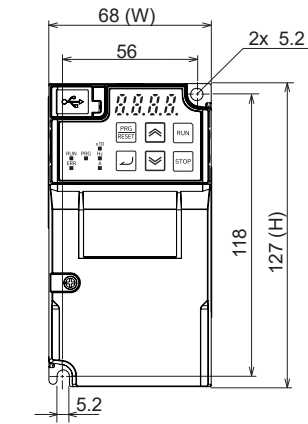
Common specifications

| Model number 3G3M1-A_-EMP | | Specifications |
|---------------------------|-------------------------------|---|
| Control functions | Control methods | V/f, Dynamic torque vector and vector control with and without feedback. |
| | Motor support | Asynchronous Induction motor Permanent Magnet synchronous motor (Only Vector control with and without feedback) |
| | Frequency control range | 0.00 to 590.0 Hz |
| | Frequency tolerance | Digital inputs: $\pm 0.01\%$ of the max. output frequency Analog inputs: $\pm 0.2\%$ of the max. output frequency (25 ± 10 °C) |
| | Frequency setting resolution | Digital inputs: 0.01 Hz Analog inputs: Maximum frequency $\times 5/10,000$ Communication setting: 0.005% of the maximum output frequency or 0.01 Hz (fixed) |
| | Output frequency resolution | 0.001 Hz |
| | Frequency setting signal | Main speed freq reference: -10 to 10 VDC (22 k Ω) |
| | Starting torque | V/f: 150%/10% of rated speed 200% /0.5Hz Vector without sensor or V/f with feedback 200%/0.0 Hz Vector with feedback |
| | Speed control range | 1:100 V/f mode 1:200 Dynamic torque vector without feedback / vector without feedback / V/f with feedback 1:500 Dynamic torque vector with feedback 1:1500 Vector control with feedback |
| | Zero speed control | Vector with feedback |
| | Torque limits | 4 quadrant and 4 independent settings |
| | Accel/Decel Time | 0.00 to 6000s (the drive can set two pairs of different acceleration and deceleration times) |
| Functionality | Protective functions | Overcurrent, Overvoltage, Undervoltage, Electronic thermal, Temperature error, Ground-fault current at power-on, Rush current prevention circuit, Overload limit, Incoming overvoltage, External trip, Memory error, CPU error, USP error, Communication error, Overvoltage suppression during deceleration, Power interruption protection, Emergency shutoff, etc. |
| | Main control functions | Torque boost, AVR control, Energy saving, Motor sound, slip compensation, DC injection, Frequency auto-search, current limiter, ASR control, zero speed control servo lock, heavy deceleration brake, pre-excitation, Positioning, Master-Slave follower, overload stop, second motor, brake control. |
| Environment | Operation ambient temperature | -10 to 50 °C (Derating required) |
| | Storage ambient temperature | -25 to 70 °C (Short-time temperature during shipment) |
| | Operating ambient humidity | 5 to 95% (with no condensation) |
| | Vibration resistance | Vibration Frequency specifications 2 to 9Hz - 3mm (Max. Amplitude) 9 to 20 Hz - 1G 20 to 55 Hz - 0.2G 55 to 200 Hz - 0.1G |
| | Location | Maximum altitude of 1,000 m, indoors (without corrosive gases or dust). From 1,000 to 3,000 a derating of 0,6% every 100m should be applied. |

Standards

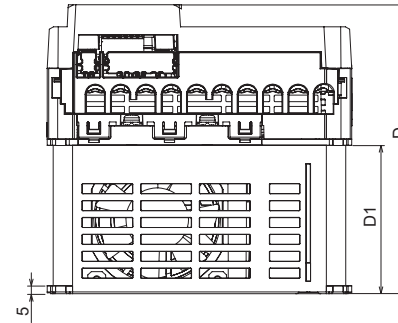
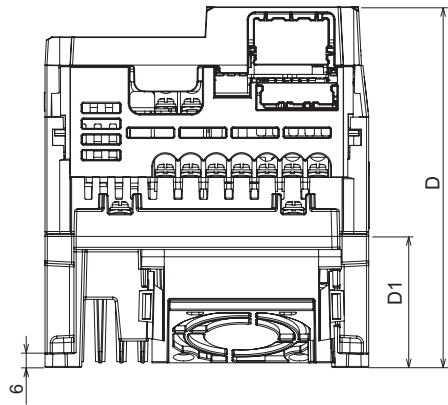
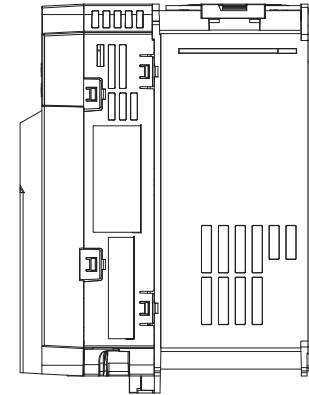
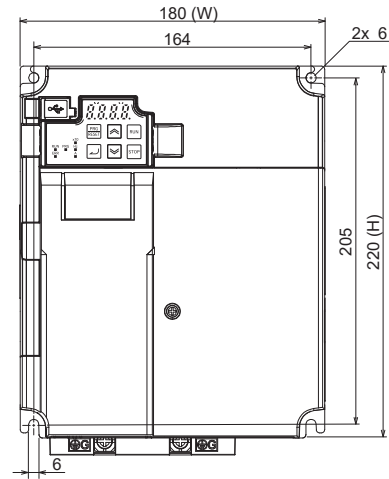
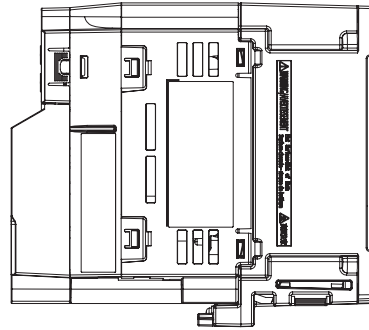
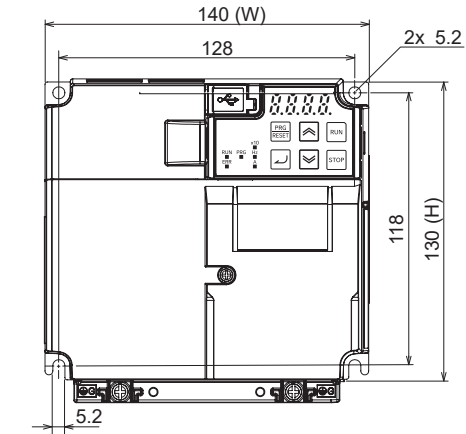
| Model number 3G3M1-A_-EMP | | Specifications | |
|---------------------------|---------|-------------------------------|---|
| Regulations and Standards | CE UKCA | EMC | EN 61800-3:2004/A1:2012 (2018 is ratified) |
| | | Functional safety | IEC 61800-5-2:2016 IEC/EN 61800-5-2:2017 STO SIL3 EN ISO 13849-1:2015, Cat.3 / Ple (2016 already exist) |
| | | Electrical safety | EN 61800-5-1:2017 |
| | UL | US | UL61800-5-1, Edition 1, 2012 (A1 2017 ratified) |
| | | CA | CSA-C22.2 No.274, 2017 |
| | KC | | KS-C9800-3 (Pending) |
| | EAC | | - |
| | RCM | | EN 61800-3:2004+A1:2012 (2016 ratified) |
| Protection design | | Open chassis type: IP20 Model | |

Dimensions



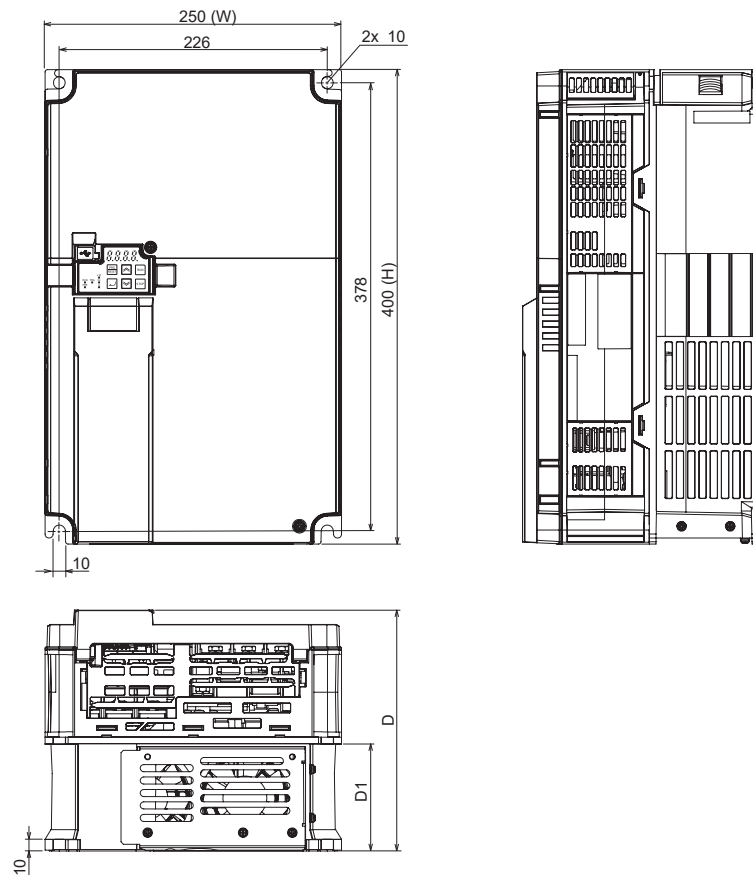
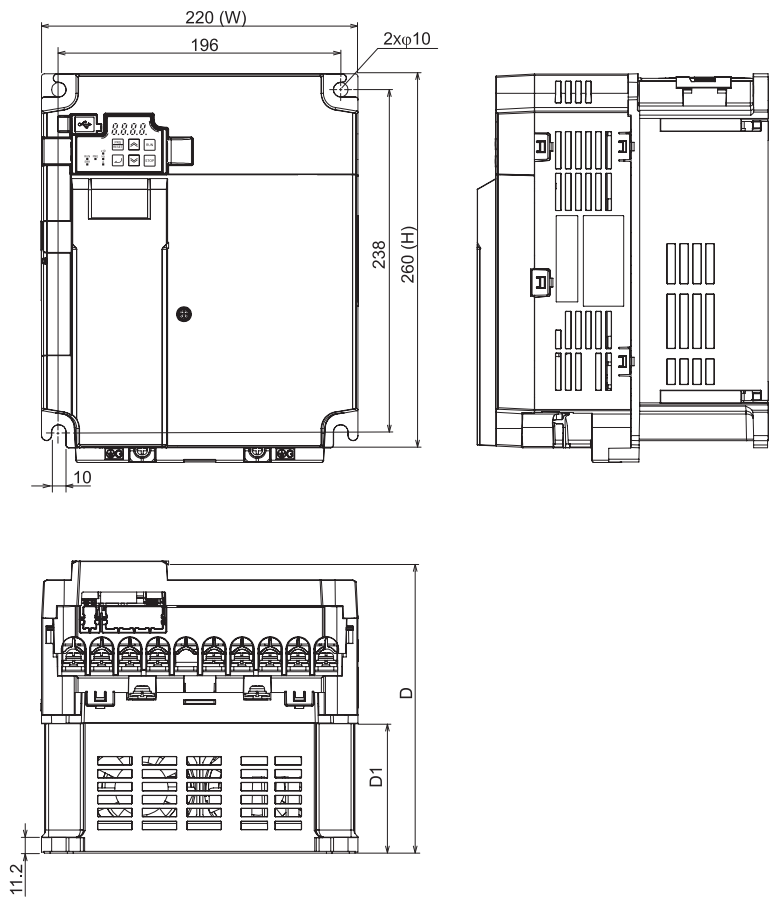
| Power supply | Model | W (mm) | H (mm) | D (mm) | D1 (mm) |
|-------------------|-------------|--------|--------|--------|---------|
| Single-phase 200V | 3G3M1-AB002 | 68 | 127 | 98 | 8 |
| | 3G3M1-AB004 | | | 120 | 23 |
| | 3G3M1-AB007 | | | 165 | 48 |
| Three-phase 200V | 3G3M1-A2002 | 68 | 127 | 98 | 8 |
| | 3G3M1-A2004 | | | 113 | 23 |
| | 3G3M1-A2007 | | | 145 | 48 |

| Power supply | Model | W (mm) | H (mm) | D (mm) | D1 (mm) |
|-------------------|-------------|--------|--------|--------|---------|
| Single-phase 200V | 3G3M1-AB015 | 110 | 130 | 166 | 58 |
| | 3G3M1-A2015 | | | 156 | 58 |
| Three-phase 200V | 3G3M1-A2022 | 110 | 130 | | 132 |
| | 3G3M1-A4004 | | | 156 | 58 |
| 3G3M1-A4007 | | | | | |
| 3G3M1-A4015 | | | | | |
| Three-phase 200V | 3G3M1-A4022 | 110 | 130 | 156 | 58 |
| | 3G3M1-A4022 | | | | |



| Power supply | Model | W (mm) | H (mm) | D (mm) | D1 (mm) |
|--------------------|-------------|--------|--------|--------|---------|
| Single-phase 200 V | 3G3M1-AB022 | 140 | 130 | 156 | 58 |
| Three-phase 200 V | 3G3M1-A2037 | | | | |

| Power supply | Model | W (mm) | H (mm) | D (mm) | D1 (mm) |
|--------------------|-------------|--------|--------|--------|---------|
| Single-phase 200 V | 3G3M1-AB037 | 140 | 130 | 156 | 58 |
| Three-phase 200 V | 3G3M1-A2055 | | | | |
| | 3G3M1-A2075 | | | | |
| Three-phase 400 V | 3G3M1-A4055 | | | | |
| | 3G3M1-A4075 | | | | |



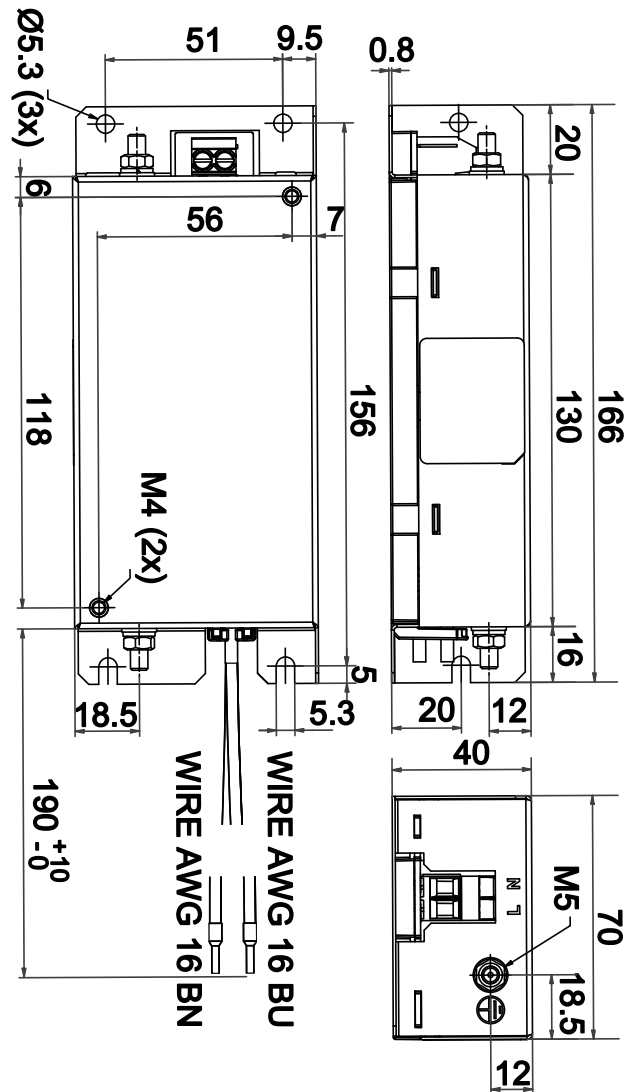
| Power supply | Model | W (mm) | H (mm) | D (mm) | D1 (mm) |
|-------------------|-------------|--------|--------|--------|---------|
| Three-phase 200 V | 3G3M1-A2110 | 220 | 260 | 203 | 90 |
| | 3G3M1-A2150 | | | | |
| Three-phase 400 V | 3G3M1-A4110 | | | | |
| | 3G3M1-A4150 | | | | |

| Power supply | Model | W (mm) | H (mm) | D (mm) | D1 (mm) |
|-------------------|-------------|-------------|--------|--------|---------|
| Three-phase 200 V | 3G3M1-A2185 | 250 | 400 | 203 | 90 |
| Three-phase 400 V | 3G3M1-A4185 | | | | |
| | | 3G3M1-A4220 | | | |

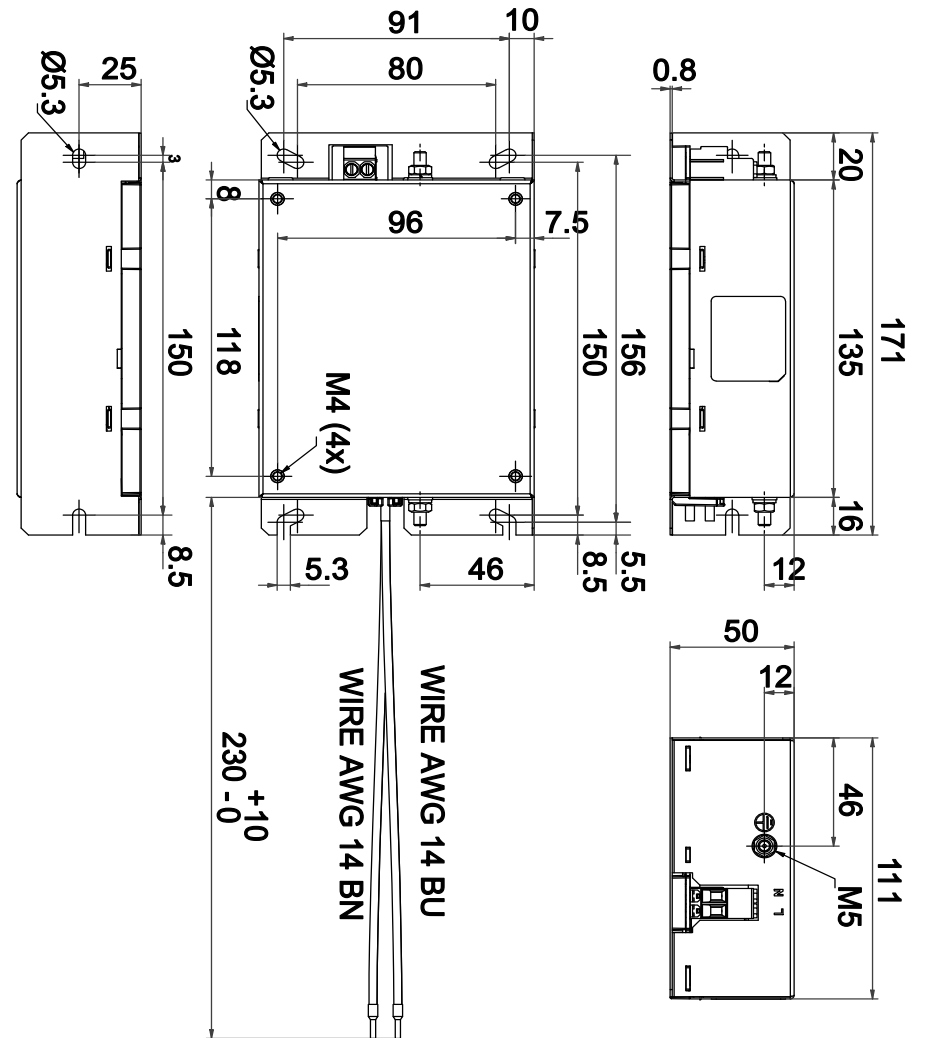
Line filters

Same dimensions for standard and LL version

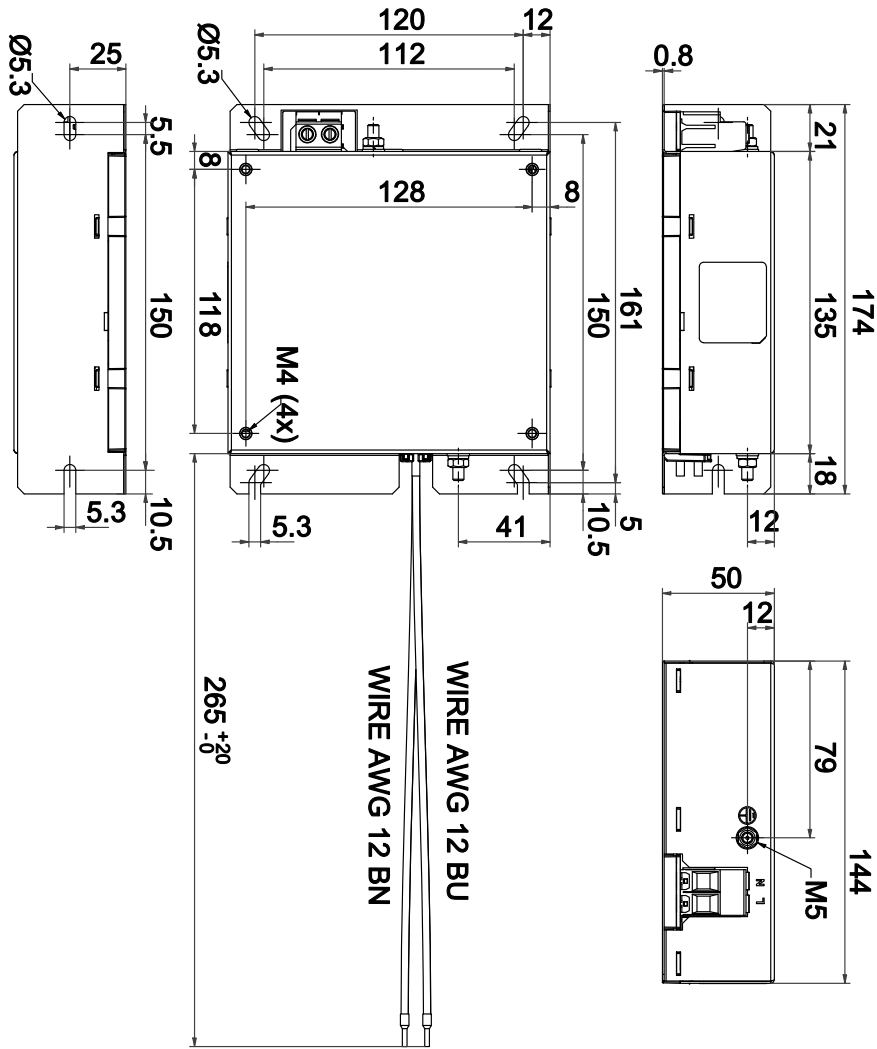
AX-FIC1014-SE / SE-LL



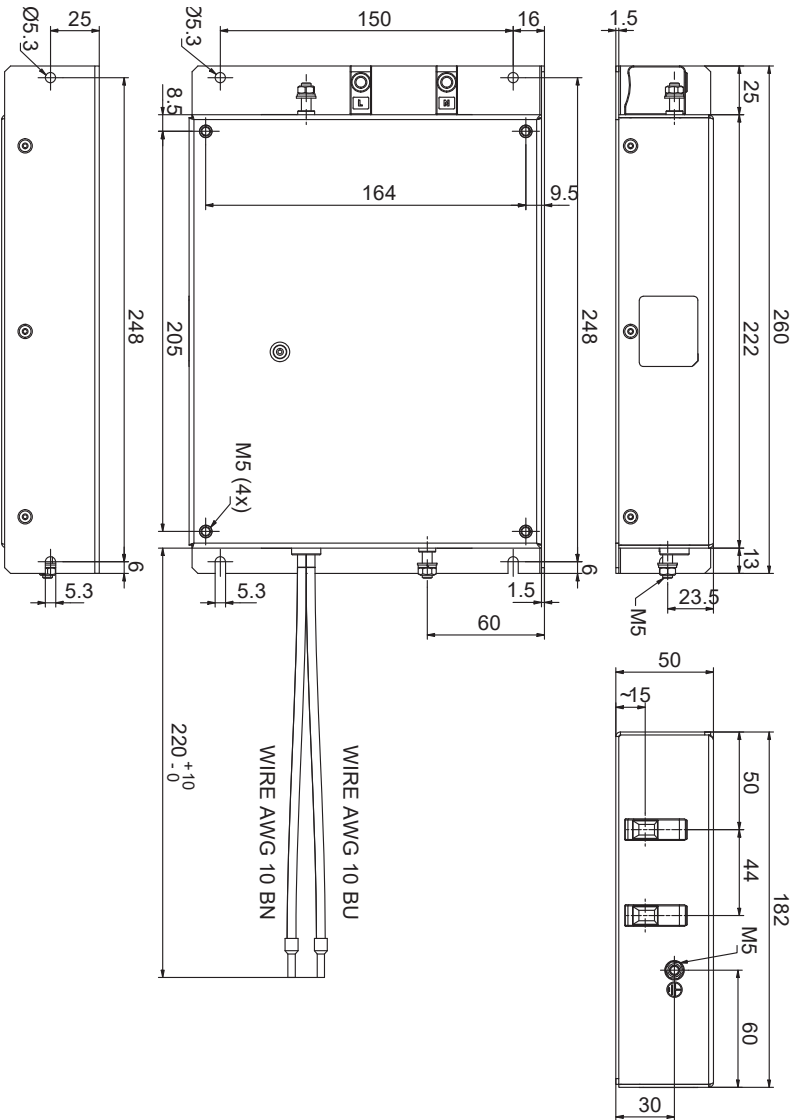
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AX-FIC1026-SE / SE-LL

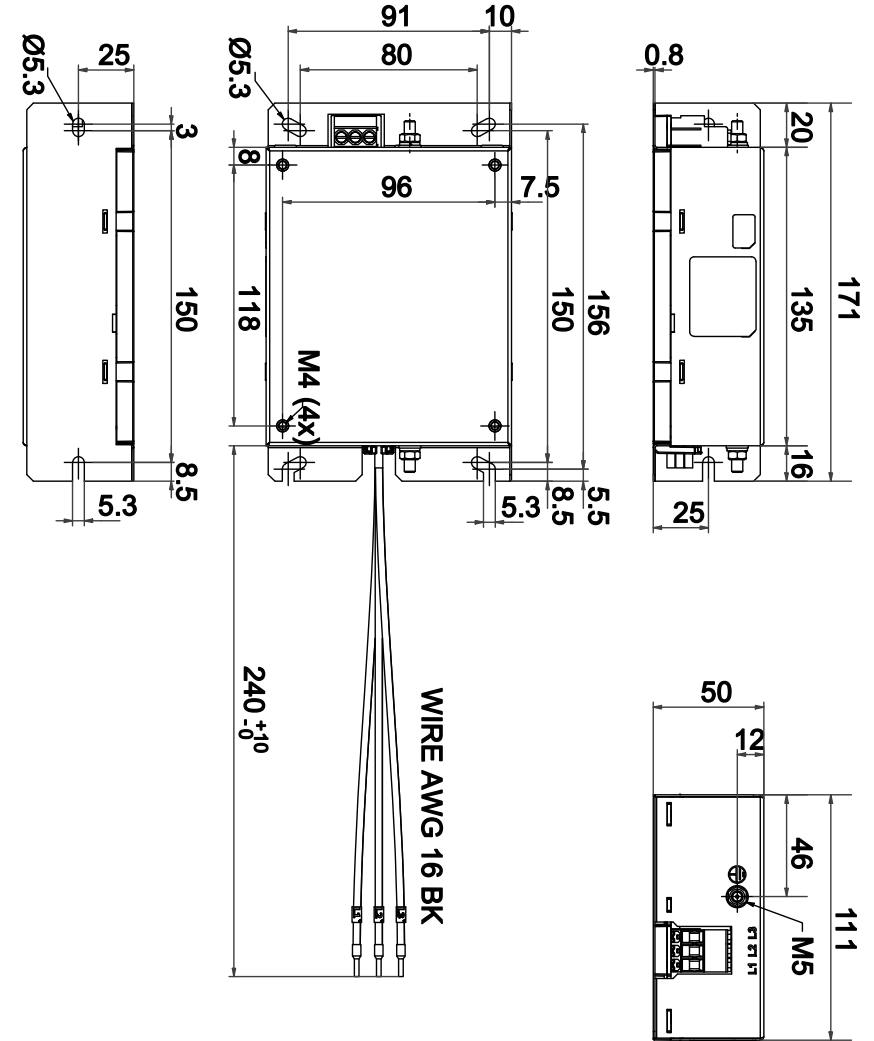
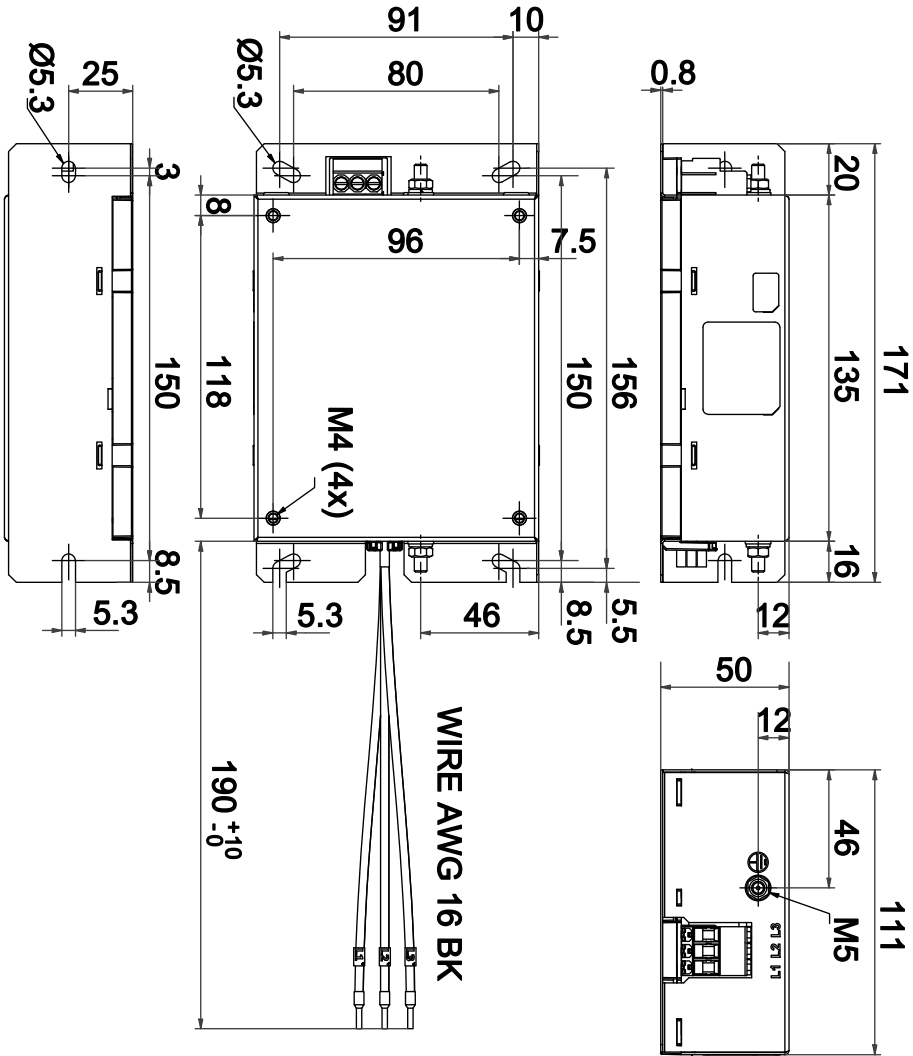


AX-FIC1045-SE / SE-LL

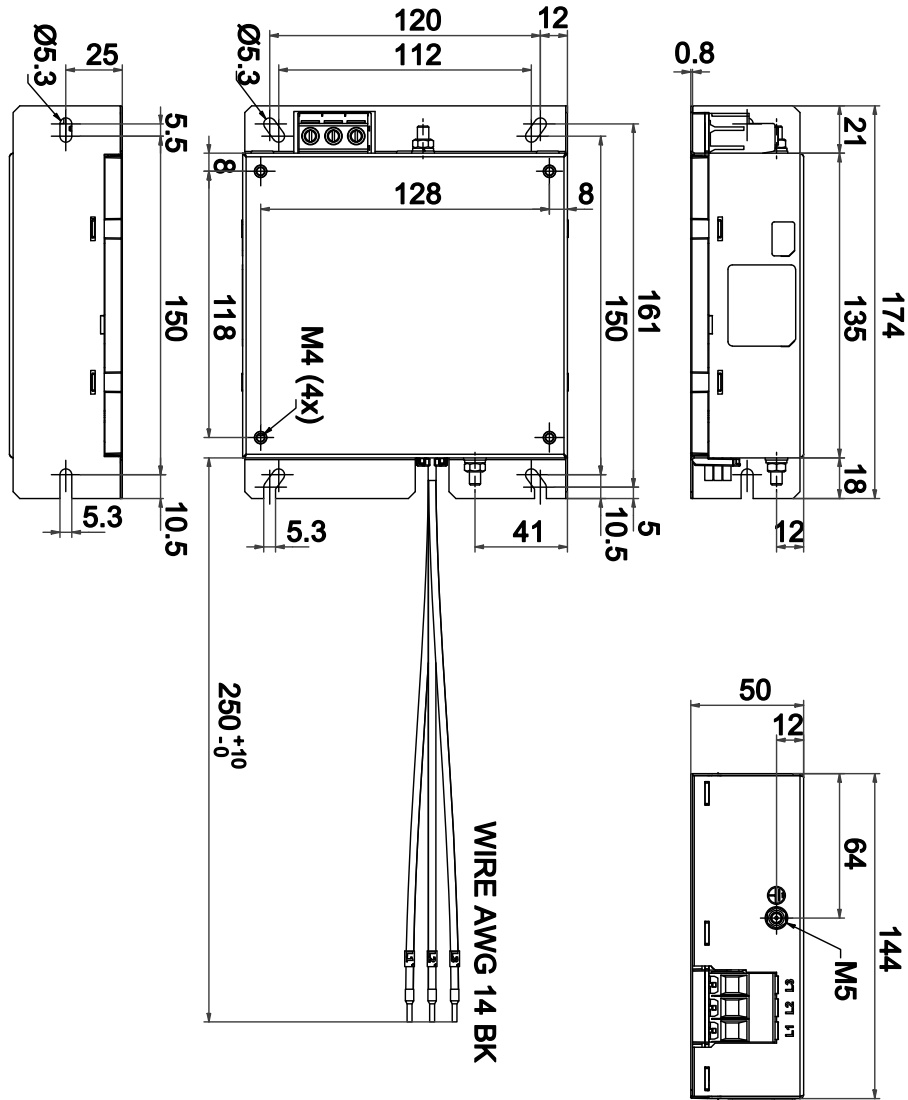


AX-FIC4004-SE / SE-LL

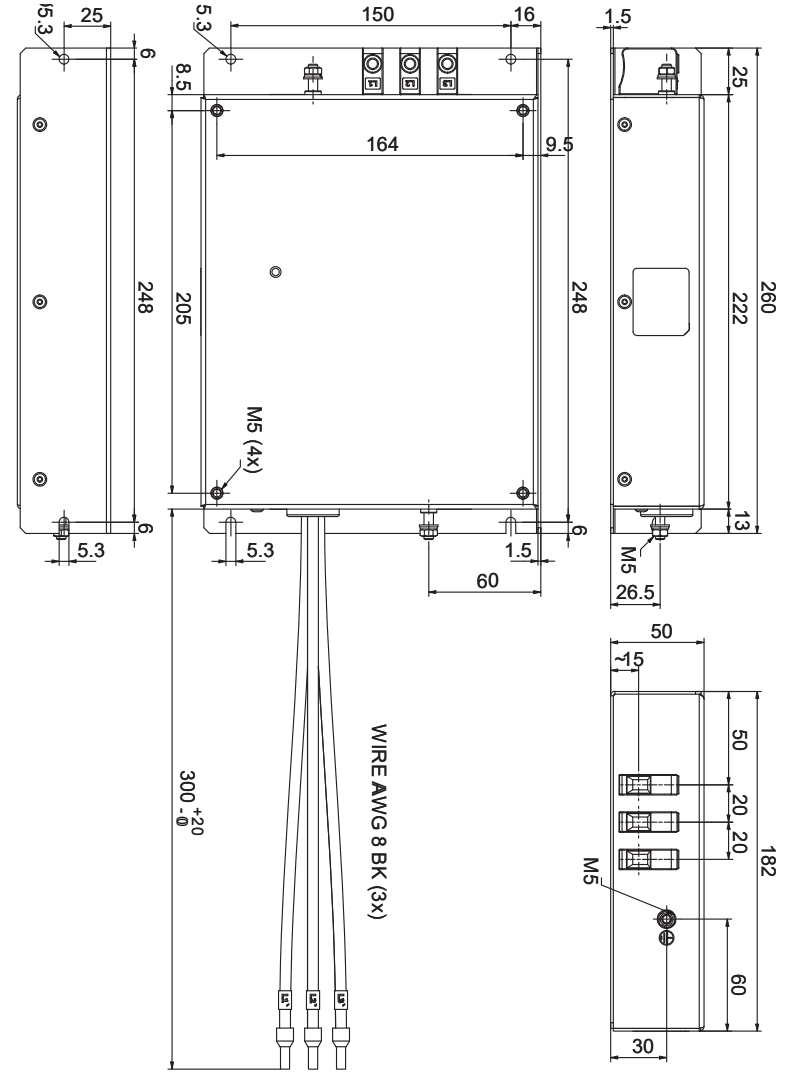
AX-FIC4011-SE / SE-LL



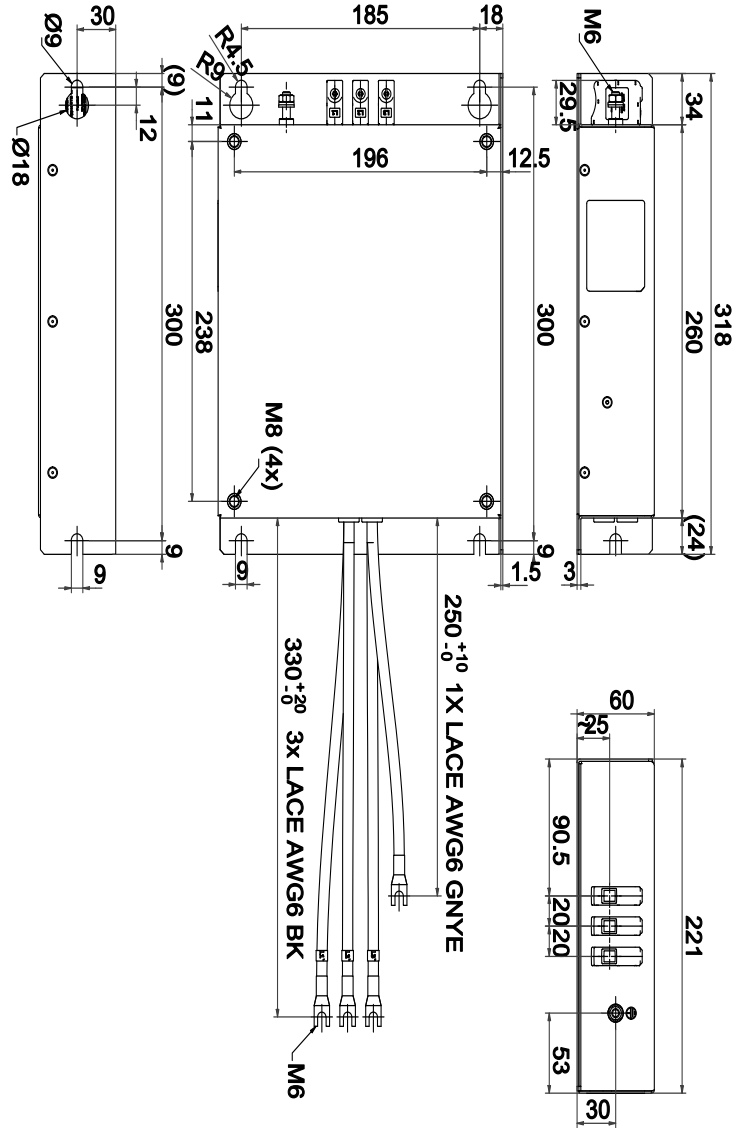
AX-FIC4017-SE / SE-LL



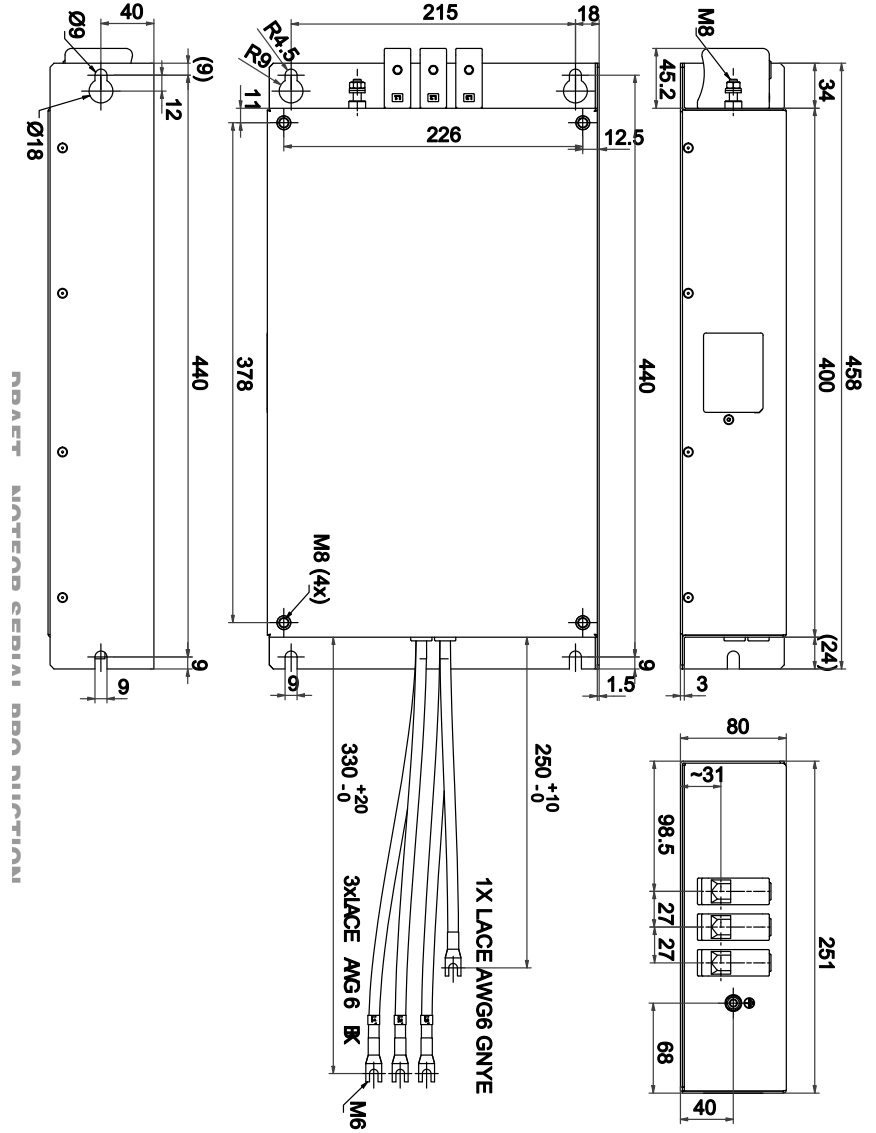
AX-FIC4044-SE / SE-LL



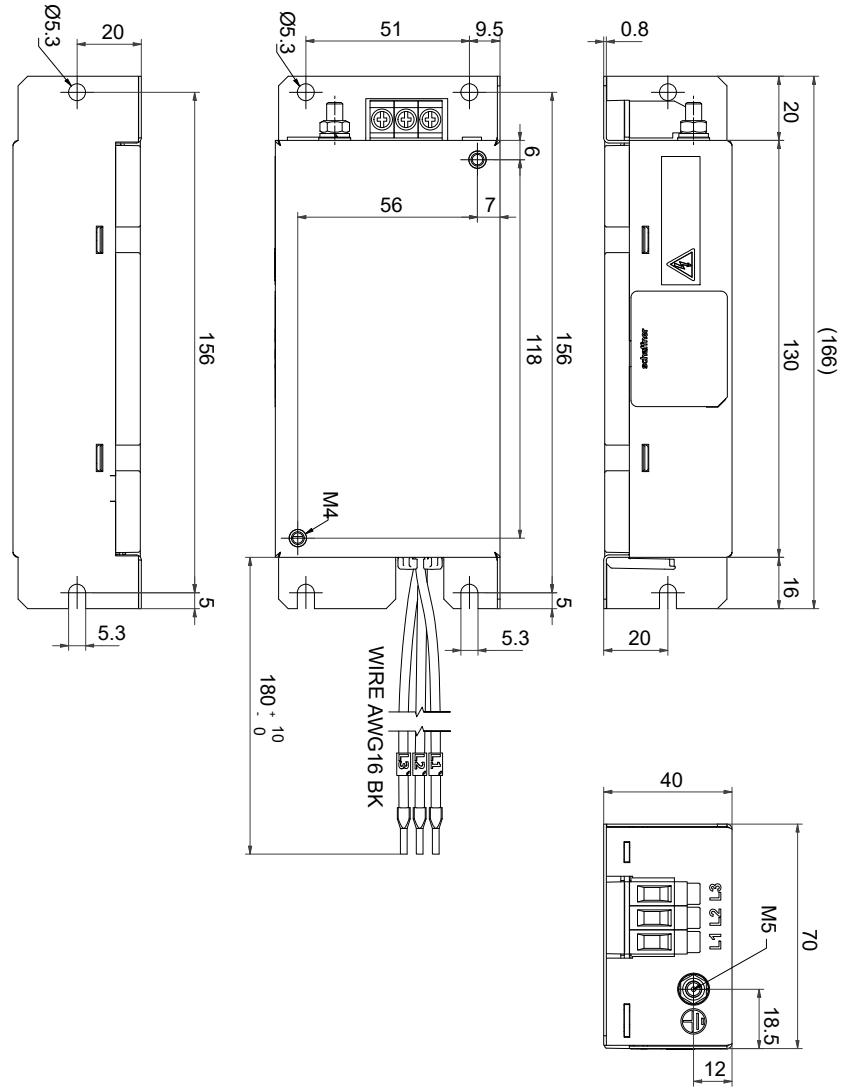
AX-FIC4061-SE / SE-LL



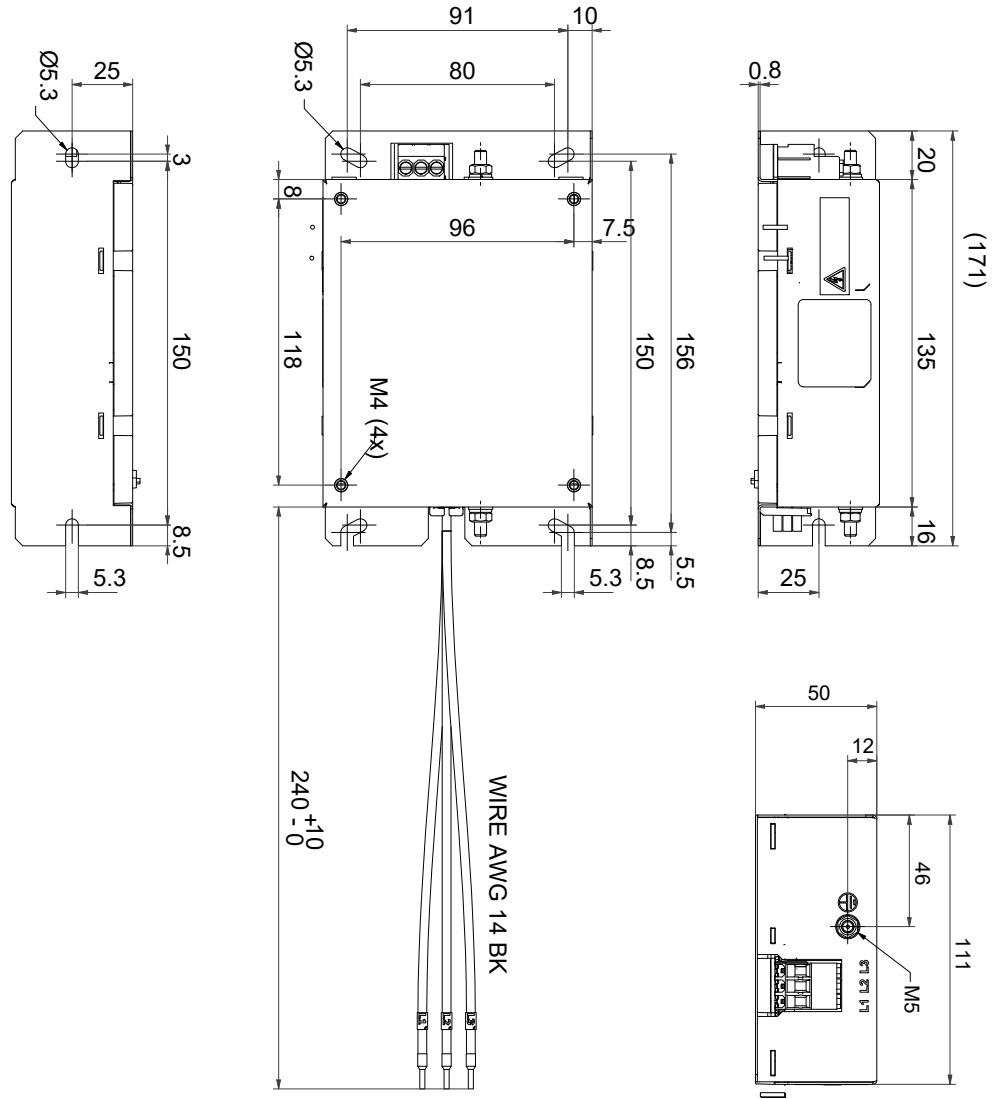
AX-FIC4095-SE / SE-LL



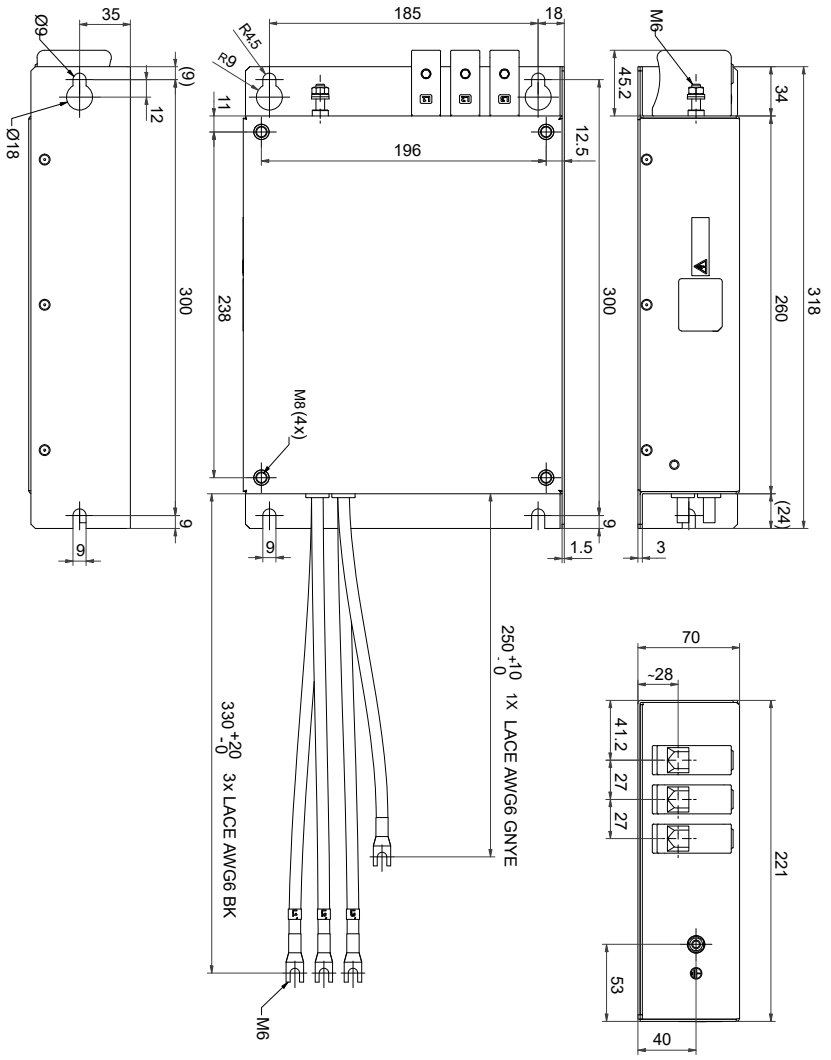
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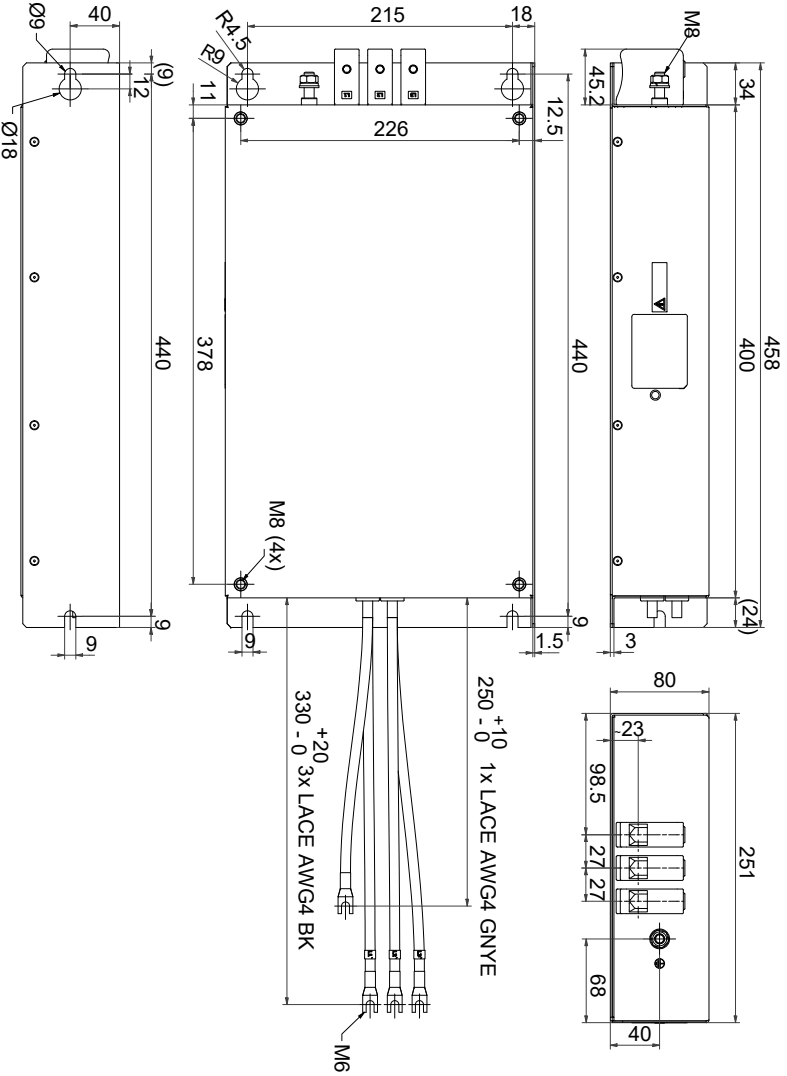
AX-FIC2018-SE



AX-FIC2097-SE



AX-FIC2112-SE



Input AC Reactor

| Voltage | Reference | Fig | Dimensions | | | | | | | | | | Weight (kg) | |
|--------------------|-------------------|-----|------------|-----|-----|------|-----|-----|----|-----|-----|---|-------------|------|
| | | | A | B | B2 | C | C2 | D | E | F | G | H | | |
| Single-phase 200 V | AX-RAI02000070-DE | 1 | 84 | | - | 96 | - | 101 | 66 | 5 | 7.5 | 2 | 1.22 | |
| | 116 | | | | | 1.95 | | | | | | | | |
| | 131 | | | | | 2.55 | | | | | | | | |
| | 116 | | | | | 1.95 | | | | | | | | |
| | AX-RAI00210330-DE | 2 | | 80 | | | | 62 | | | | | 2.35 | |
| Three-phase 200 V | AX-RAI02920030-DE | 2 | 120 | 113 | 70 | | 120 | 80 | 52 | 5.5 | | | 1.78 | |
| | AX-RAI01570050-DE | | | | | | | | | | | | | |
| | AX-RAI00940080-DE | | | | | | | | | | | | | |
| | AX-RAI00670110-DE | | | | | | | | | | | | | |
| | AX-RAI00450170-DE | | | | | | | | | | | | | |
| | AX-RAI00290250-DE | | | | | | | | | | | | | |
| | AX-RAI00210330-DE | | | | | | | | | | | | | |
| | AX-RAI00180670-DE | | | | | | | | | | | | | |
| | AX-RAI00110600-DE | | | | | | | | | | | | | |
| | AX-RAI00070870-DE | | | | | | | | | | | | | |
| | AX-RAI00091000-DE | | | | | | | | | | | | | |
| | AX-RAI00091000-DE | | | | | | | | | | | | | |
| Three-phase 400 V | AX-RAI07700042-DE | 2 | 120 | 113 | 70 | | 120 | 80 | 52 | 5.5 | | | 1.78 | |
| | AX-RAI03700040-DE | | | | | | | | | | | | | |
| | AX-RAI03700040-DE | | | | | | | | | | | | | |
| | AX-RAI02800080-DE | | | | | | | | | | | | | |
| | AX-RAI01630090-DE | | | | | | | | | | | | | |
| | AX-RAI01300170-DE | | | | | 180 | | | | | | | | |
| | AX-RAI00810180-DE | | | | | 120 | | | | | | | | |
| | AX-RAI00740335-DE | | | | | 180 | | | | | | | | |
| | AX-RAI00440300-DE | | | | | | | | | | | | | |
| | AX-RAI00300450-DE | | | | | | | | | | | | | |
| | AX-RAI00360500-DE | | | | | | | | | | | | | |
| | AX-RAI00290780-DE | | | | | | | | | | | | | |
| | | | 105 | | 205 | | 140 | 55 | 6 | | | | 6.5 | |
| | | | | | | | | 75 | | | | | | 11.2 |

Figure 1

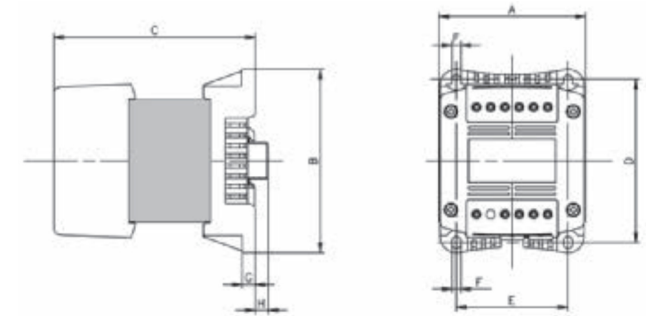
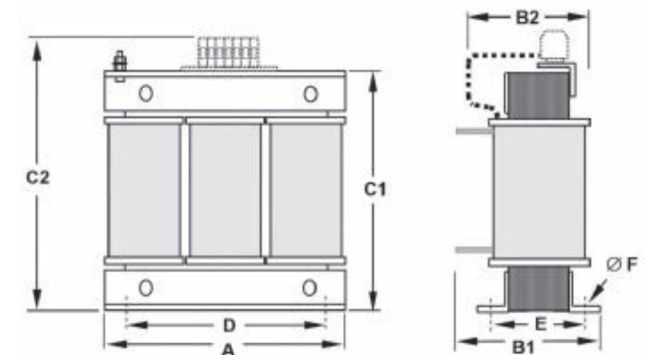


Figure 2



DC Reactor

| Voltage | Reference | Fig | Dimensions (mm) | | | | | | | | Weight (kg) |
|------------------|------------------|-----|-----------------|-----|-----|-----|-----|-----|-------|-------|-------------|
| | | | A | B | C | D | E | F | G | H | |
| 200 V | AX-RC21400016-DE | 1 | 84 | 113 | 96 | 101 | 66 | 5 | 7.5 | 2 | 1.22 |
| | AX-RC10700032-DE | | | | 105 | | | | | | 1.60 |
| | AX-RC06750061-DE | | | | | | | | | | 1.95 |
| | AX-RC03510093-DE | | 108 | 135 | 124 | 120 | 82 | 6.5 | 9.5 | 9.5 | 3.20 |
| | AX-RC02510138-DE | | | | 136 | | | | | | 5.20 |
| | AX-RC01600223-DE | | 120 | 152 | 146 | 135 | 94 | 7 | 2 | - | 6.00 |
| | AX-RC01110309-DE | | | | 160 | | | | | | 11.40 |
| | AX-RC00840437-DE | | | | 183 | | | | | | 14.30 |
| | AX-RC00590614-DE | | 150 | 177 | 160 | 160 | 115 | 7 | 2 | - | 11.40 |
| | AX-RC00440859-DE | | | | 183 | | | | | | 14.30 |
| AX-RC00301275-DE | 2 | 195 | 161 | 163 | 185 | 88 | 10 | - | - | 17.00 | |
| 400 V | AX-RC43000020-DE | 1 | 84 | 113 | 96 | 101 | 66 | 5 | 7.5 | 2 | 1.22 |
| | AX-RC27000030-DE | | | | 105 | | | | | | 1.60 |
| | AX-RC14000047-DE | | | | | | | | | | 116 |
| | AX-RC10100069-DE | | 108 | 135 | 133 | 120 | 82 | 6.5 | 9.5 | 9.5 | 3.70 |
| | AX-RC06400116-DE | | | | 136 | | | | | | 5.20 |
| | AX-RC04410167-DE | | 120 | 152 | 146 | 135 | 94 | 7 | 2 | - | 6.00 |
| | AX-RC03350219-DE | | | | 160 | | | | | | 11.40 |
| | AX-RC02330307-DE | | | | 183 | | | | | | 14.30 |
| | AX-RC01750430-DE | | 150 | 177 | 160 | 160 | 115 | 7 | 2 | - | 11.40 |
| | AX-RC01200644-DE | | | | 183 | | | | | | 14.30 |
| AX-RC01750430-DE | 195 | 161 | 163 | 185 | 88 | 10 | - | - | 17.00 | | |
| AX-RC00920797-DE | | | 196 | | | | | | 123 | 25.00 | |

Figure 1

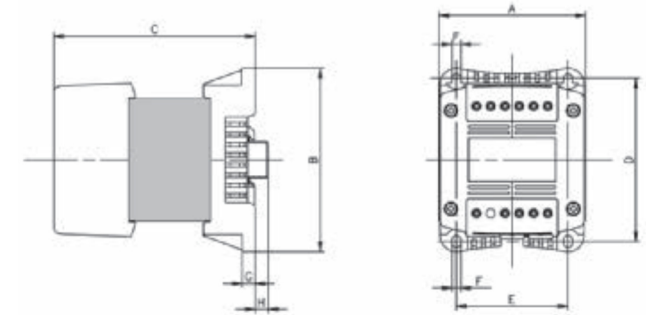
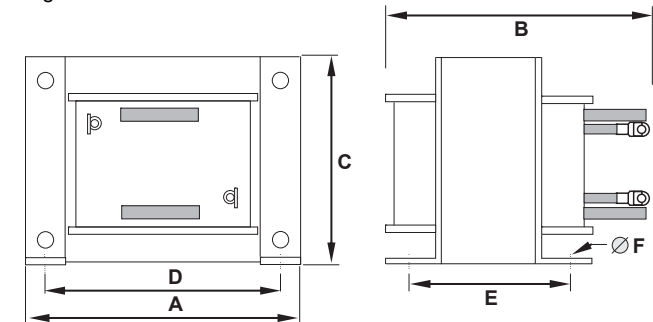
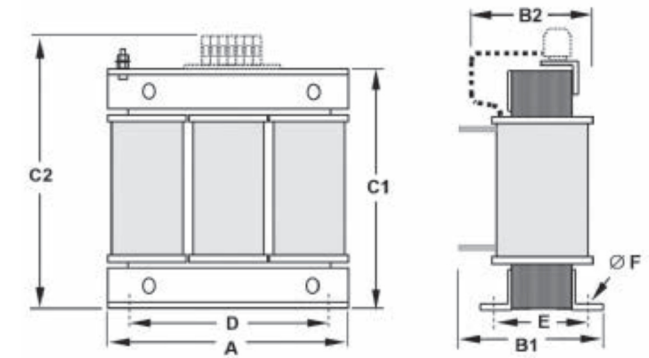


Figure 2

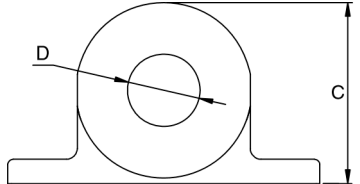
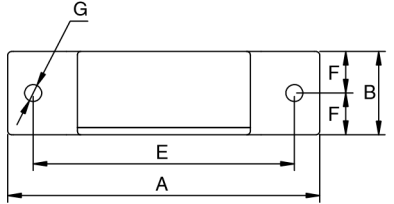
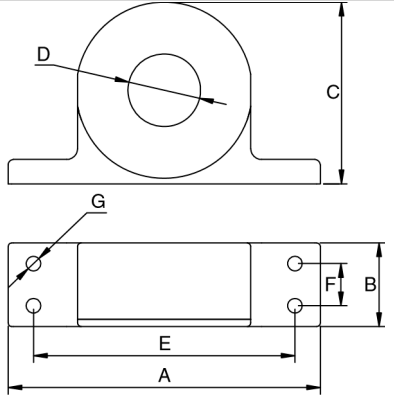


Output AC Reactor

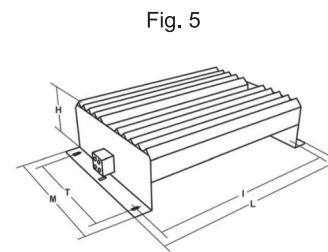
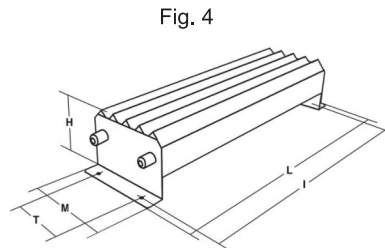
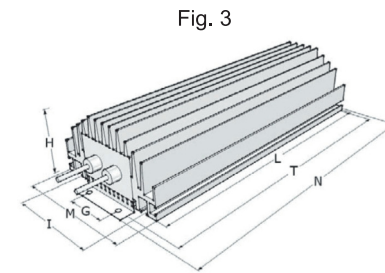
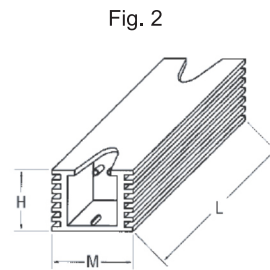
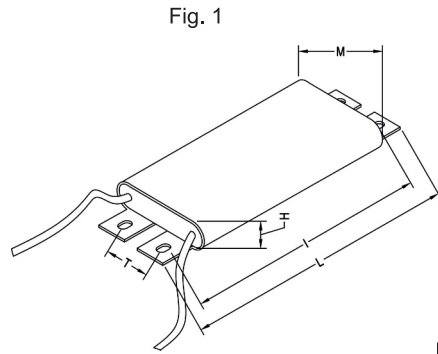
| Voltage | Reference | Dimensions (mm) | | | | | | Weight (kg) |
|---------|-------------------|-----------------|-----|------|-----|------|-----|-------------|
| | | A | B2 | C2 | D | E | F | |
| 200 V | AX-RAO11500026-DE | 120 | 70 | 120 | 80 | 52 | 5.5 | 1.78 |
| | AX-RAO07600042-DE | | 80 | | | 62 | | |
| | AX-RAO04100075-DE | | | 5.5 | | | | |
| | AX-RAO03000105-DE | 180 | 85 | 195 | 140 | 55 | 6 | 5.5 |
| | AX-RAO01830160-DE | | | | | | | |
| | AX-RAO01150220-DE | | | 9.1 | | | | |
| | AX-RAO00950320-DE | | | 11.7 | | | | |
| | AX-RAO00630430-DE | | | 105 | | 275 | | 200 |
| | AX-RAO00490640-DE | 110 | | | | | | |
| | AX-RAO00390800-DE | 240 | 110 | 275 | 200 | 75 | 6 | 16.0 |
| | AX-RAO00330950-DE | | | | | | | |
| 400 V | AX-RAO16300038-DE | 120 | 80 | 120 | 80 | 62 | 5.5 | 2.35 |
| | AX-RAO11800053-DE | | | | | | | |
| | AX-RAO07300080-DE | 180 | 85 | 195 | 140 | 55 | 6 | 5.5 |
| | AX-RAO04600110-DE | | | | | | | |
| | AX-RAO03600160-DE | | | 9.1 | | | | |
| | AX-RAO02500220-DE | 240 | 110 | 275 | 200 | 75 | 6 | 16.0 |
| | AX-RAO02000320-DE | | | | | | | |
| | AX-RAO01650400-DE | | | 85 | | 18.6 | | |
| | AX-RAO01300480-DE | | | | | 120 | | |
| | AX-RAO00800750-DE | | | 120 | | | | |



Chokes

| Reference | D(diameter) | Motor (kW) | Dimensions (mm) | | | | | | | Weight | |
|---------------|-------------|------------|-----------------|----|-----|----|-----|------|--------------|--------|--|
| | | | A | B | C | D | E | F | G (diameter) | | |
| AX-FER2102-PE | 21 | <2.2 | 86 | 24 | 50 | 21 | 70 | 12 | 4 | 0.09 |  |
| AX-FER2815-PE | 28 | <15 | 106 | 25 | 65 | 28 | 90 | 12.5 | 4 | 0.22 |  |
| AX-FER5045-PE | 50 | <45 | 150 | 51 | 112 | 50 | 125 | 30 | 5 | 0.53 |  |

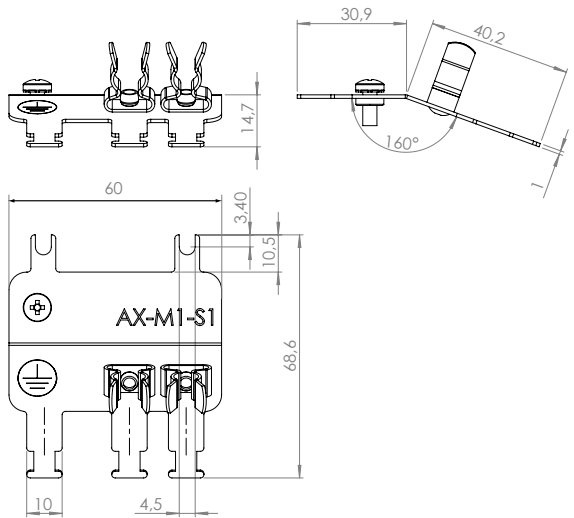
Braking resistor



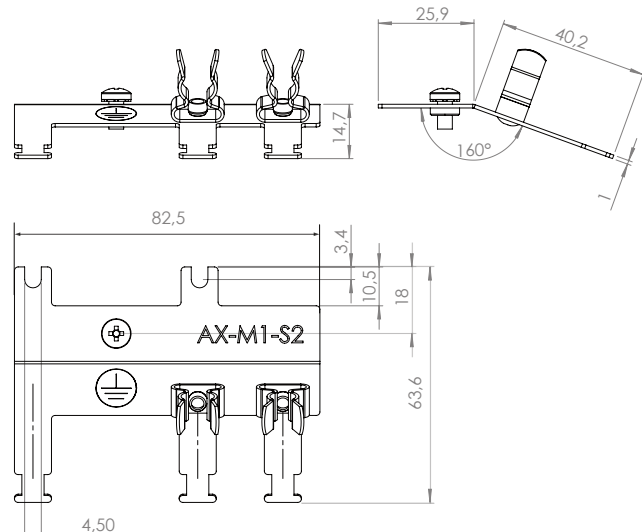
| Type | Fig | Dimensions (mm) | | | | | | | Weight (kg) |
|------------------|-----|-----------------|-----|-----|------|-----|----|-----|-------------|
| | | L | H | M | I | T | G | N | |
| AX-REM00K1xxx-IE | 1 | 182 | 13 | 45 | 168 | 20 | | | 0.27 |
| AX-REM00K2xxx-IE | 2 | 105 | 27 | 36 | 94 | - | | | 0.17 |
| AX-REM00K3xxx-IE | | 155 | | | 144 | | | | 0.26 |
| AX-REM00K4xxx-IE | | 200 | | | 189 | | | | 0.425 |
| AX-REM00K6xxx-IE | | 320 | | | 309 | | | | 0.73 |
| AX-REM00K9xxx-IE | 3 | 200 | 61 | 100 | 74.5 | 216 | 40 | 230 | 1.41 |
| AX-REM01K1xxx-IE | | 260 | | | | 276 | | 290 | 1.83 |
| AX-REM01K2xxx-IE | | 320 | | | | 336 | | 350 | 2.25 |
| AX-REM01K9xxx-IE | 4 | 365 | 73 | 105 | 350 | 70 | - | | 4 |
| AX-REM02K1xxx-IE | 5 | 310 | 115 | 230 | 295 | 170 | | | 7 |
| AX-REM03K5xxx-IE | | 365 | | | 350 | | | | 8 |

Shield clamps dimensions

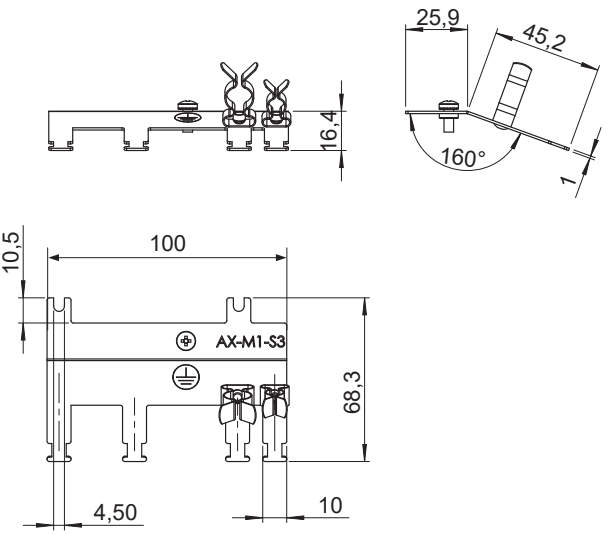
AX-M1-S1



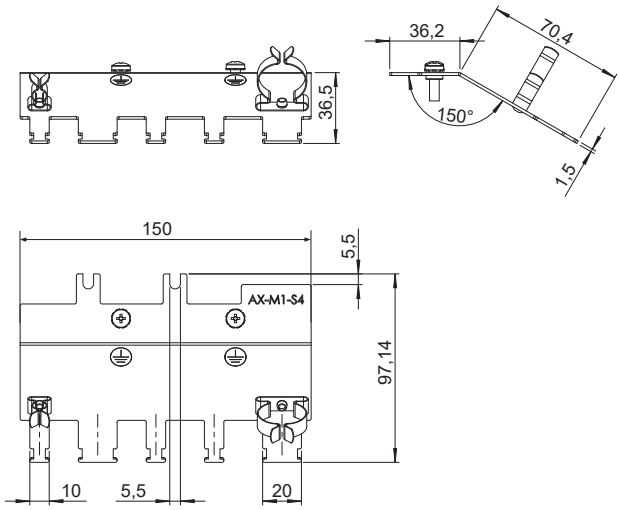
AX-M1-S2



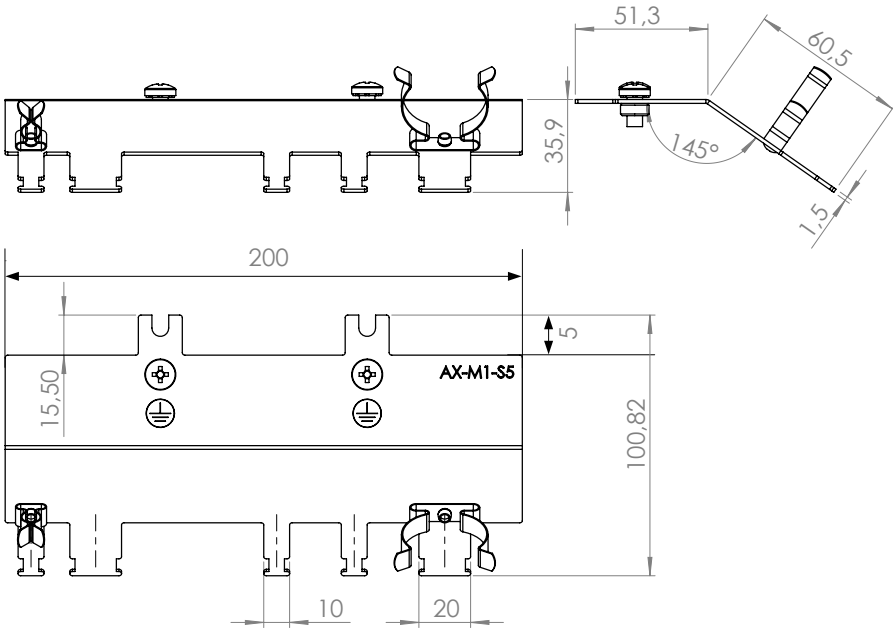
AX-M1-S3



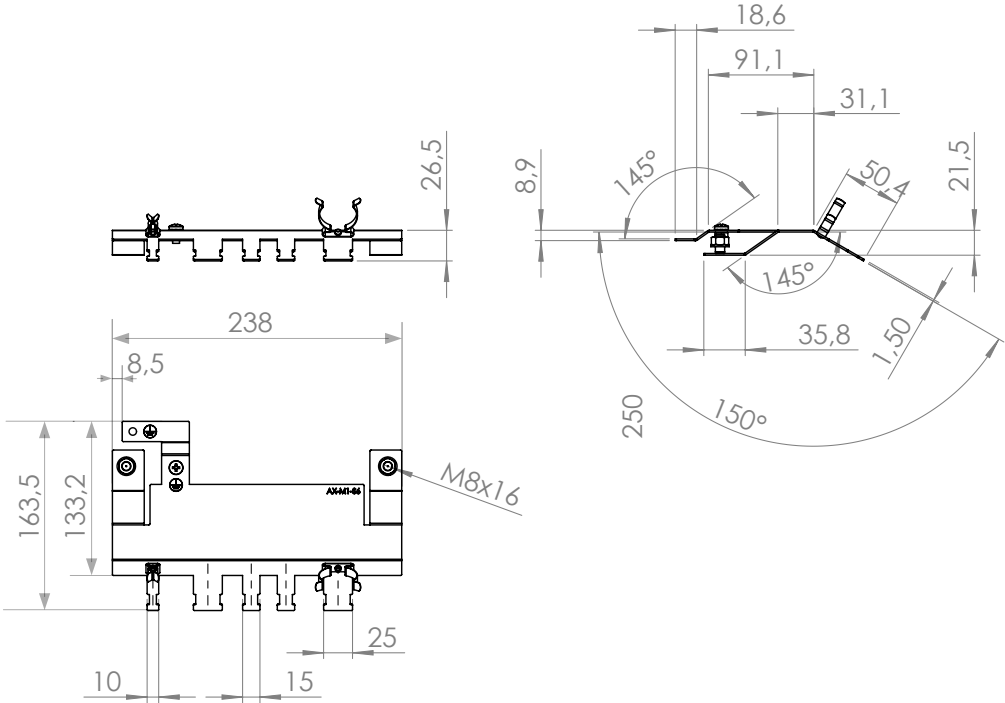
AX-M1-S4



AX-M1-S5

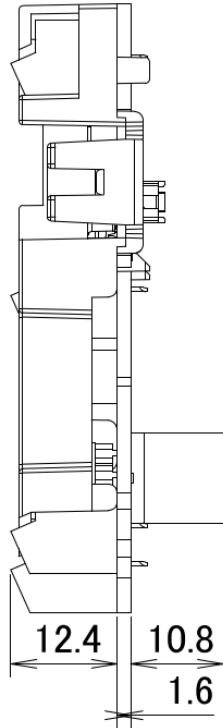
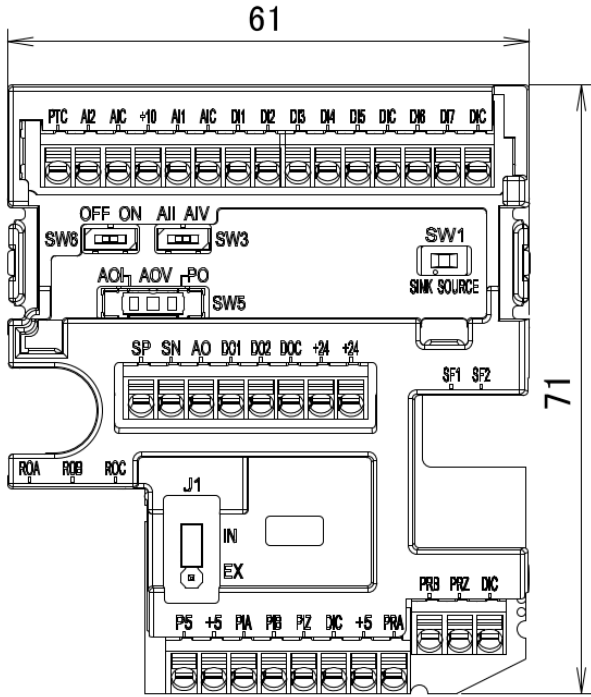


AX-M1-S6

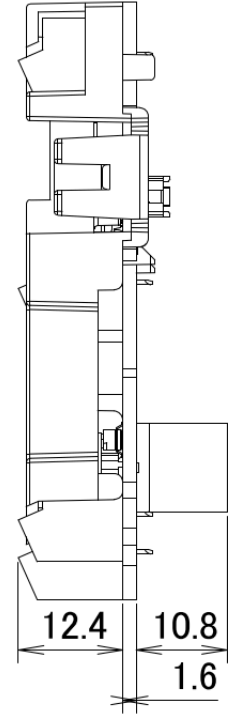
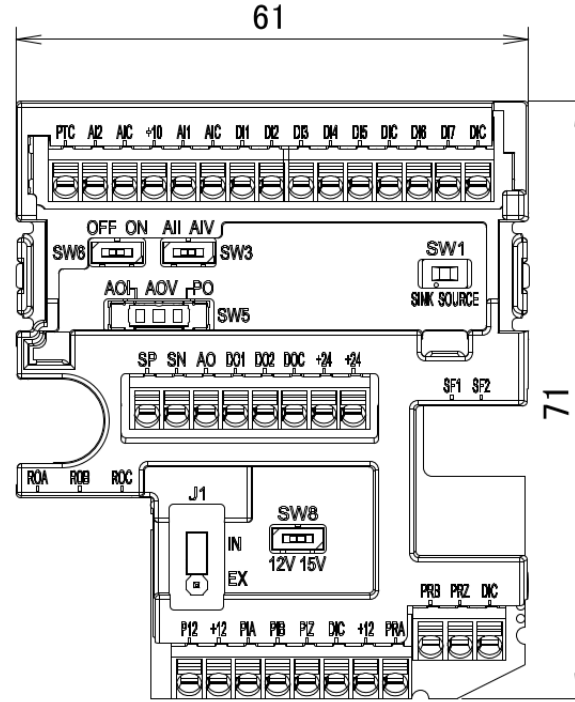


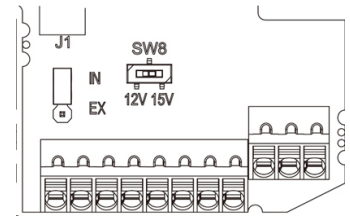
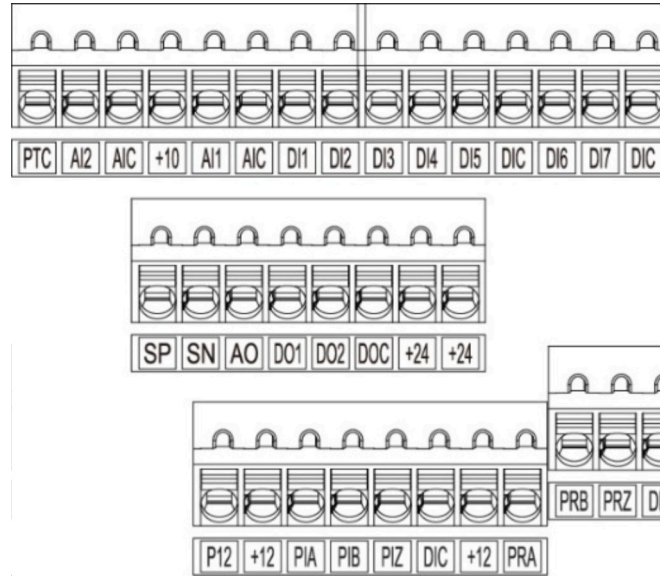
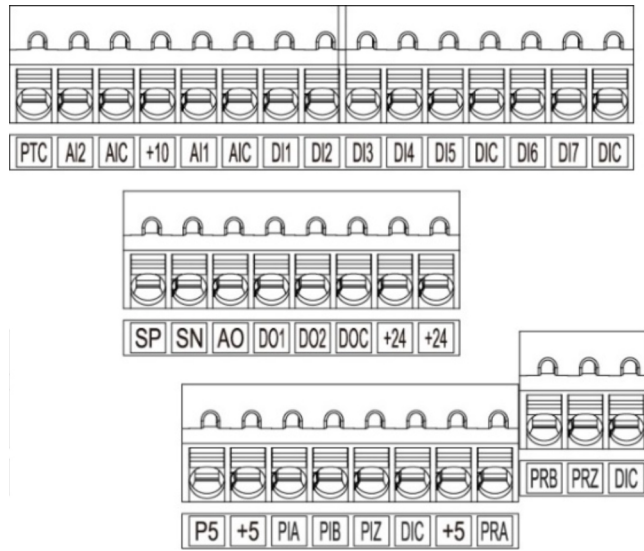
Dual encoder option board

3G3A1-PG05-E

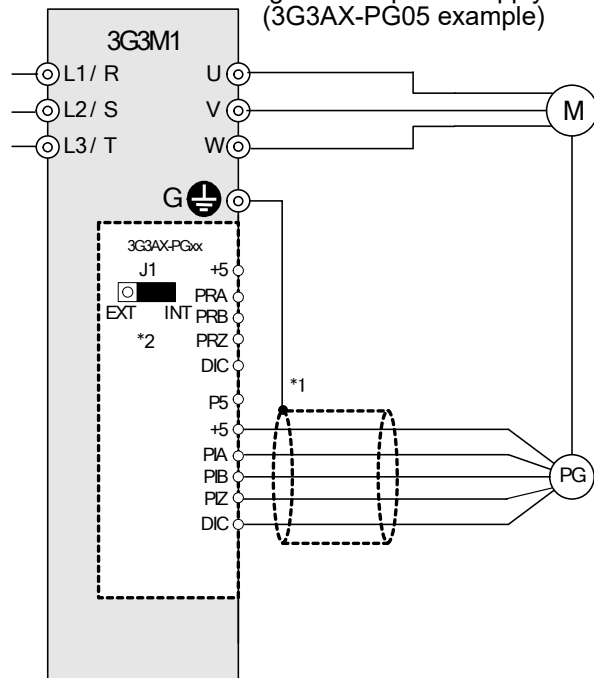


3G3A1-PG15-E

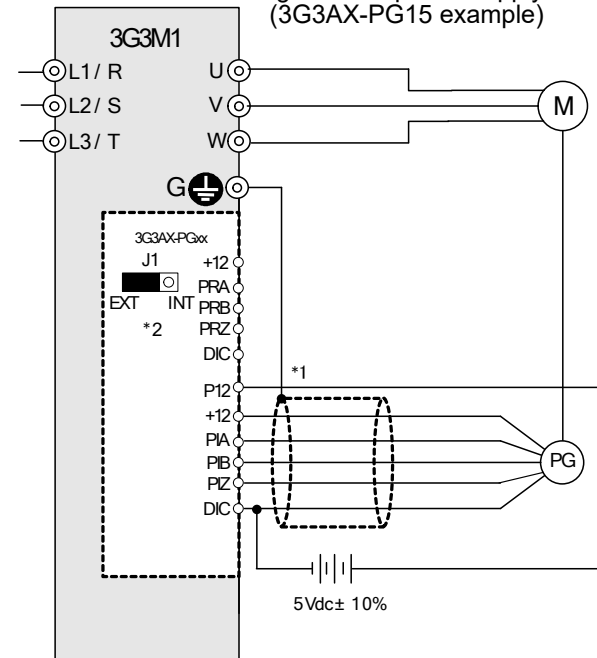




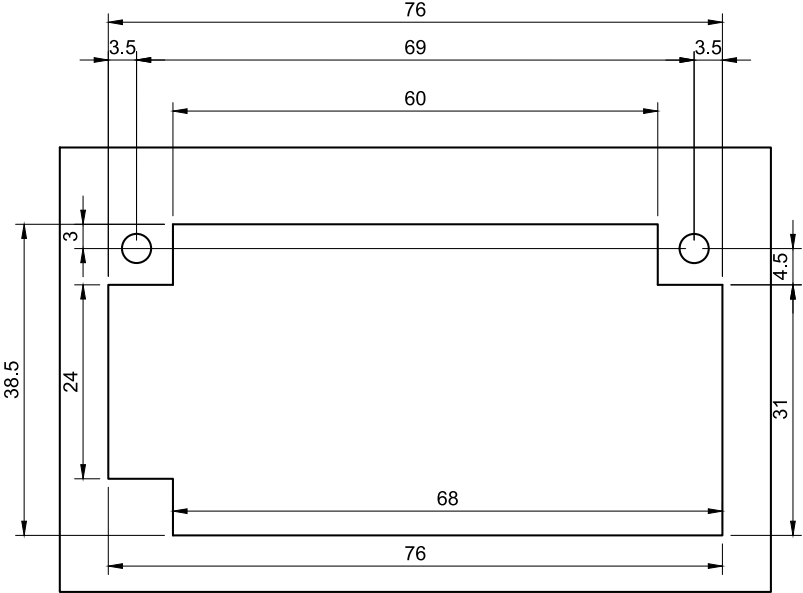
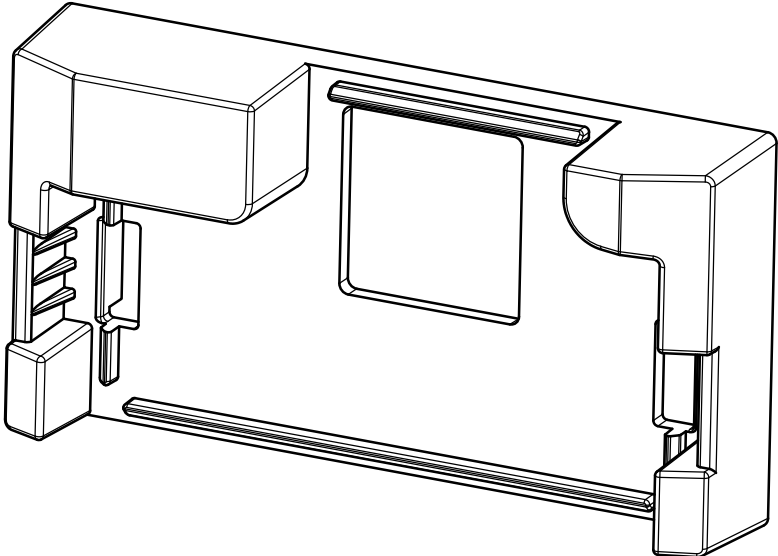
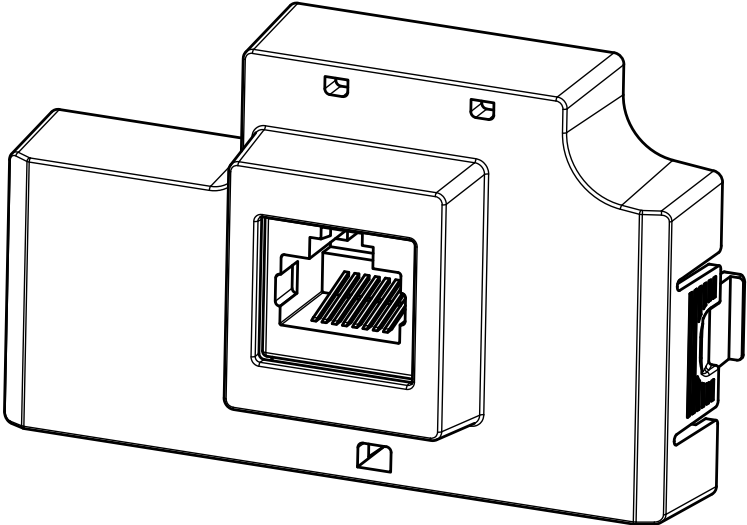
When using external power supply
(3G3AX-PG05 example)



When using external power supply
(3G3AX-PG15 example)



Remote operator mounting CBAD-CP

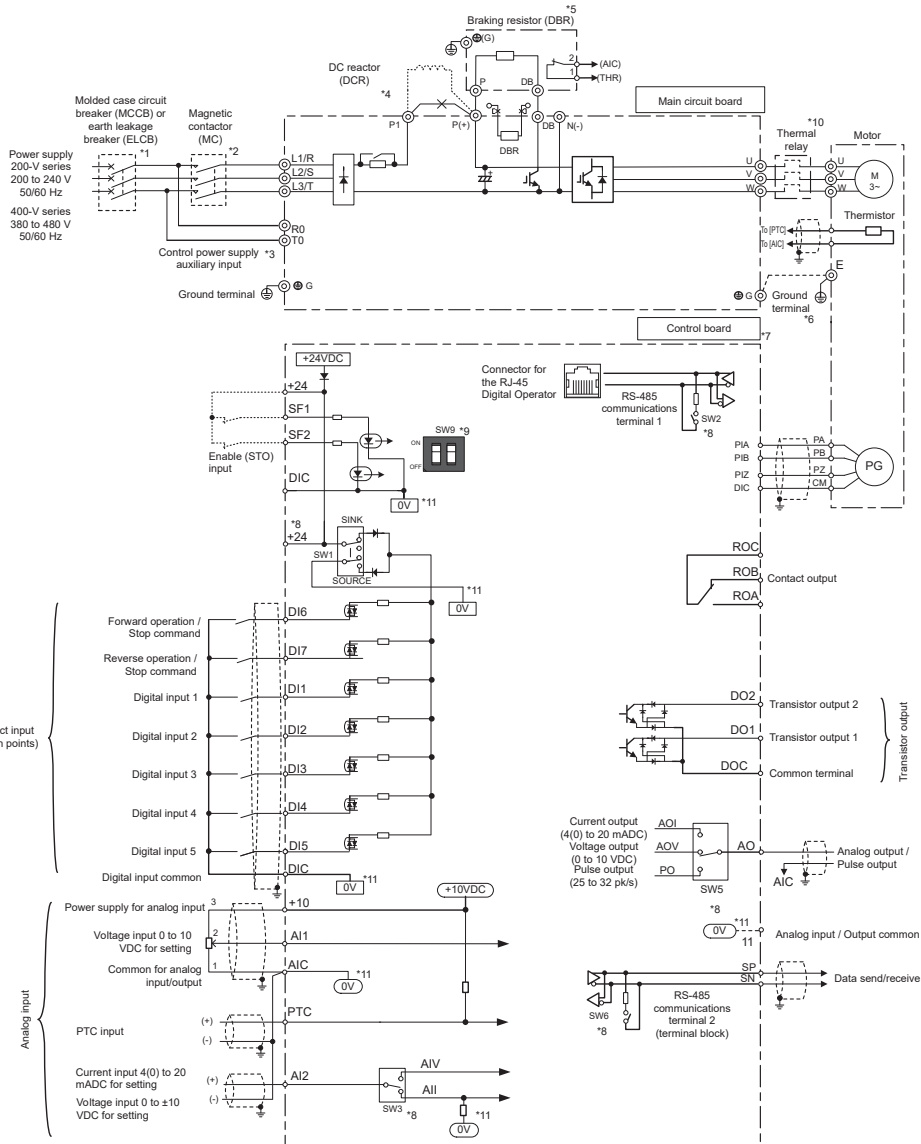


Installation

Standard connections

Main circuit

| Terminal | Name | Function |
|------------------|--|---|
| L1/R, L2/S, L3/T | Main supply terminals (3G3M1-A2 and 3G3M1-A4) | Used to connect a power supply |
| L1/L, L2/N | Main circuit power supply input (3G3M1-AB_) | Used to connect a power supply |
| U, V, W | Inverter output terminal | Used to connect a motor |
| P(+), DB | Braking resistor connection | To connect a braking resistor |
| P1, P(+) | DC reactor connection Regenerative braking unit connection terminal | Remove the short-circuit to connect to the optimal DC reactor |
| P(+), N(-) | | Connect optional regenerative braking unit if braking torque produced by internal braking transistor is not enough |
| R0, T0 | Control power supply auxiliary input | Only available for inverter size of 18KW or more. Helps to keep control signal, digital operator or communications alive while main supply is OFF 3G3M1-A2185: 1-phase 200 to 240V 50/60Hz 3G3M1-A4185/220: 1-phase 220 to 480V, 50/60Hz |
| G | Ground terminal | Connect the terminal to ground |

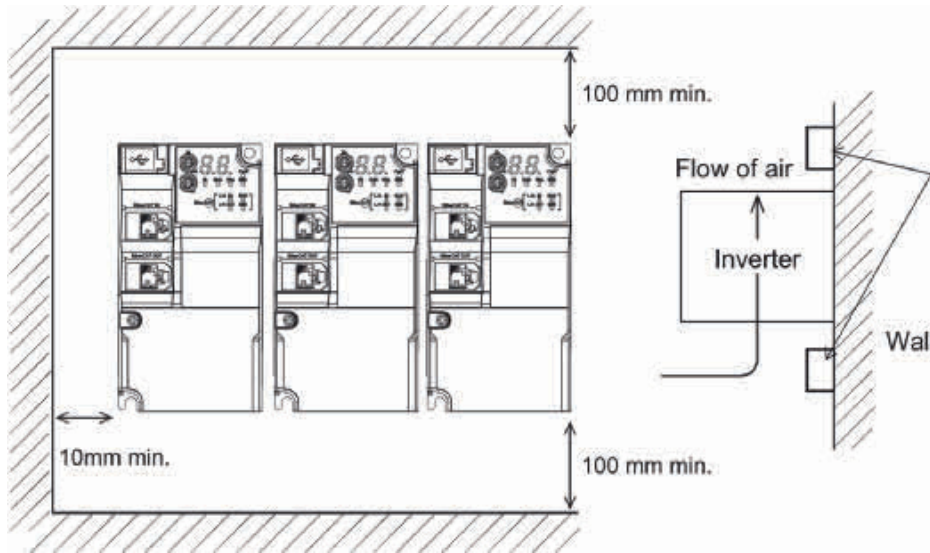


Control circuit

| Type | Terminal | Name | Function (Signal level) |
|-----------------------|----------|--|---|
| Digital input signals | DI1 | Multi-Function Digital Input 1 (Multi-speed 1) | Voltage levels between input and the DIC: ON voltage: 20V min OFF voltage: 2V max Maximum 27 VDC Load current (DI1, DI2): 2.5 to 16mA (At 27V) Load current (DI3 to DI7): 2.5 to 5mA (at 27V) Impedance: 5.4 kΩ |
| | DI2 | Multi-Function Digital Input 2 (Multi-speed 2) | |
| | DI3 | Multi-Function Digital Input 3 (Multi-speed 3) | |
| | DI4 | Multi-Function Digital Input 4 (Multi-speed 4) | |
| | DI5 | Multi-Function Digital Input 5 (Free run stop) | |
| | DI6 | Multi-Function Digital Input 6 (Forward) | |
| | DI7 | Multi-Function Digital Input 7 (Reverse) | |
| | DIC | Input Signal common | |
| Safety digital inputs | SF1 | Safe input 1 | Voltage levels between input and the DIC ON voltage: 20V min OFF voltage: 2V max Maximum 27VDC Load current: 2.5 to 5mA (at 27V) Impedance: 6.6 kΩ |
| | SF2 | Safe input 2 | |
| Pulse | PIA | Pulse and encoder input | Voltage between input and DIC (5 to 24 VDC) ON voltage: 4 V min OFF voltage: 2 V max Maximum 27 VDC Frequency: 32 KHz |
| | PIB | | Voltage between input and DIC (5 to 24 VDC) ON voltage: 4 V min OFF voltage: 2 V max Maximum 27 VDC Frequency: 32 KHz max Impedance: : 7.2 kΩ |
| | PIZ | | |

| Type | Terminal | Name | Function (signal level) |
|------------------------------------|----------|---|---|
| Analog input signals | +10 | Power supply for analog input | Max. Current: 10 mA |
| | AI1 | Analog voltage input | -10 to 10VDC, 22kΩ range -15 to 10 VDC |
| | AI2 | Current input | 4 to 20 mA, 250Ω, range 0 to 30 mA |
| | | Voltage input | 0 to 10 VDC, 22 kΩ, range -15 to 10 VDC |
| | AIC | Analog input common | |
| | PTC | External thermistor input | Thermistor between the PTC and the AIC |
| Fault relay output | ROA | Relay output terminal NO | Relay output 250 VAC, 0,3 A 48 VDC, 0.5 A |
| | ROB | Relay output terminal NC | |
| | ROC | Relay output common | |
| Multi-function photocoupler output | DO1 | Multi-Function Photocoupler Output 1 (During Run) | Open collector output across DO1-DOC Max Voltage 48 VDC and 50mA |
| | DO2 | Output 2 (Thermal warning) | |
| | DOC | Output signal common | |
| | +24 | Power supply terminal | Max 100 mA |
| Monitor Outputs | AO/PO | Pulse train output | 32 KΩ, max, 11 VDC, 2 mA max |
| | AO/AOV | Voltage monitor | 0 to 10V/ 0 to 100 % 5kΩ, |
| | AO/AOI | Current monitor | 4 to 20 mA, 500 Ω, |
| Serial comms | SP | Modbus terminal (RS-485) | SP RS-485 differential (+) signal |
| | SN | | SN RS-485 differential (-) signal |

Side by side mounting



ADD 4 mm gap between drives (Side by side reduces by 10 °C ambient temperature specifications)

Drive watt loss

| Max motor capacity | 200 V | | | 400 V | | |
|--------------------|--------------------------------------|--|-----------------------------|--------------------------------------|--|-----------------------------|
| | Loss at 0% load of rated current [W] | Loss at 100% load of the rated current [W] | Efficiency at 100% load [W] | Loss at 0% load of rated current [W] | Loss at 100% load of the rated current [W] | Efficiency at 100% load [W] |
| 0.2 | 10 | 22 | 90 | - | - | - |
| 0.4 | 10 | 30 | 93 | 10 | 35 | 92 |
| 0.75 | 12 (10)*1 | 48 | 94 | 10 | 56 | 93 |
| 1.5 | 12 | 79 | 95 | 12 | 96 | 94 |
| 2.2 | 12 | 104 | 95.5 | 12 | 116 | 95 |
| 3.0 | - | - | - | 12 | 125 | 96 |
| 3.7 | 12 | 154 | 96 | - | - | - |
| 4.0 | - | - | - | 12 | 167 | 96 |
| 5.5 | 14 | 229 | 96 | - | - | - |
| 7.5 | 14 | 313 | 96 | 14 | 229 | 96 |
| 11 | 19 | 458 | 96 | 19 | 411 | 96.4 |
| 15 | 19 | 625 | 96 | 19 | 528 | 96.5 |

Fuse size for Class CC, J or T types

| Power supply voltage | Standard applicable motor (kW) | Inverter model | HND/HHD modes | Class CC, J or T fuse rating [Max. A] SCCR=100kA |
|----------------------|--------------------------------|----------------|---------------|--|
| Three phase 200 V | 0.2 | 3G3M1-A2002 | HHD | 6A (600Vac) |
| | 0.4 | 3G3M1-A2002 | HND | 6A (600Vac) |
| | | 3G3M1-A2004 | HHD | 10A (600Vac) |
| | 0.75 | 3G3M1-A2004 | HND | 10A (600Vac) |
| | | 3G3M1-A2007 | HHD | 15A (600Vac) |
| | 1.1 | 3G3M1-A2007 | HND | 15A (600Vac) |
| | 1.5 | 3G3M1-A2015 | HHD | 20A (600Vac) |
| | 2.2 | 3G3M1-A2015 | HND | 20A (600Vac) |
| | | 3G3M1-A2022 | HHD | 30A (600Vac) |
| | 3 | 3G3M1-A2022 | HND | 30A (600Vac) |
| | 3.7 | 3G3M1-A2037 | HHD | 40A (600Vac) |
| | 5.5 | 3G3M1-A2037 | HND | 50A (600Vac) |
| | | 3G3M1-A2055 | HHD | 60A (600Vac) |
| | 7.5 | 3G3M1-A2055 | HND | 80A (600Vac) |
| | | 3G3M1-A2075 | HHD | 80A (600Vac) |
| | 11 | 3G3M1-A2075 | HND | 100A (600Vac) |
| | | 3G3M1-A2110 | HHD | 100A (600Vac) |
| | 15 | 3G3M1-A2110 | HND | 150A (600Vac) |
| | | 3G3M1-A2150 | HHD | 150A (600Vac) |
| | 18.5 | 3G3M1-A2150 | HND | 175A (600Vac) |
| 3G3M1-A2185 | | HHD | 175A (600Vac) | |
| 22 | 3G3M1-A2185 | HND | 200A (600Vac) | |

| Power supply voltage | Standard applicable motor (kW) | Inverter model | HHD/HD HND/ND modes | Class CC, J or T fuse rating [Max. A] SCCR=100kA |
|----------------------|--------------------------------|----------------|---------------------|--|
| Three phase 400 V | 0.4 | 3G3M1-A4004 | HHD | 3A (600Vac) |
| | 0.75 | 3G3M1-A4004 | HD/HND | 6A (600Vac) |
| | | 3G3M1-A4004 | ND | 6A (600Vac) |
| | | 3G3M1-A4007 | HHD | 6A (600Vac) |
| | 1.1 | 3G3M1-A4007 | HD/HND | 10A (600Vac) |
| | 1.5 | 3G3M1-A4007 | ND | 10A (600Vac) |
| | | 3G3M1-A4015 | HHD | 10A (600Vac) |
| | 2.2 | 3G3M1-A4015 | HD/HND | 15A (600Vac) |
| | | 3G3M1-A4015 | ND | 15A (600Vac) |
| | | 3G3M1-A4022 | HHD | 20A (600Vac) |
| | 3 | 3G3M1-A4022 | HD/HND/ND | 20A (600Vac) |
| | | 3G3M1-A4030 | HHD | 20A (600Vac) |
| | 3.7 | 3G3M1-A4030 | HD/HND/ND | 30A (600Vac) |
| | | 3G3M1-A4040 | HHD | 30A (600Vac) |
| | 5.5 | 3G3M1-A4040 | HD/HND/ND | 30A (600Vac) |
| | | 3G3M1-A4055 | HHD | 30A (600Vac) |
| | 7.5 | 3G3M1-A4055 | HD/HND | 40A (600Vac) |
| | | 3G3M1-A4055 | ND | 60A (600Vac) |
| | | 3G3M1-A4075 | HHD | 60A (600Vac) |
| | 11 | 3G3M1-A4075 | HD/HND | 60A (600Vac) |
| | | 3G3M1-A4075 | ND | 70A (600Vac) |
| | | 3G3M1-A4110 | HHD | 60A (600Vac) |
| | 15 | 3G3M1-A4075 | ND | 70A (600Vac) |
| | | 3G3M1-A4110 | HD/HND | 70A (600Vac) |
| | | 3G3M1-A4150 | HHD | 90A (600Vac) |
| | 18.5 | 3G3M1-A4110 | ND | 90A (600Vac) |
| | | 3G3M1-A4150 | HD/HND | 90A (600Vac) |
| | | 3G3M1-A4185 | HHD | 90A (600Vac) |
| | 22 | 3G3M1-A4150 | ND | 100A (600Vac) |
| | | 3G3M1-A4185 | HD/HND | 100A (600Vac) |
| | | 3G3M1-A4220 | HHD | 100A (600Vac) |
| | 30 | 3G3M1-A4185 | ND | 125A (600Vac) |
| | | 3G3M1-A4220 | HD/HND | 125A (600Vac) |
| | 37 | 3G3M1-A4220 | ND | 175A (600Vac) |

Size for Inverse Time Circuit Breaker type

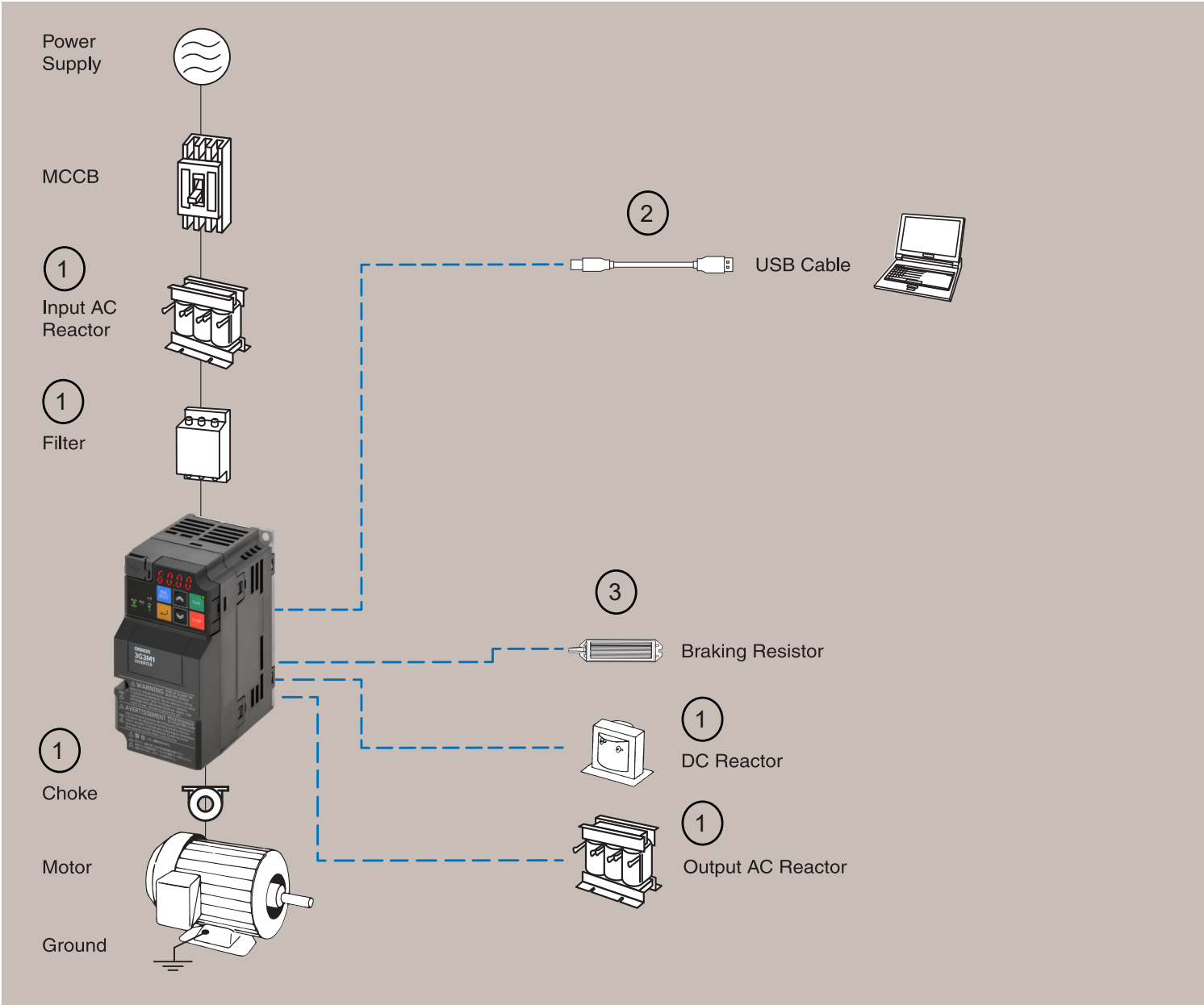
| Power supply voltage | Standard applicable motor (kW) | Inverter model | HND/HHD modes | Class CC, J or T fuse rating [Max. A] SCCR=100kA |
|----------------------|--------------------------------|----------------|---------------|--|
| Single phase 200V | 0.2 | 3G3M1-AB002 | HHD | 6A (600Vac) |
| | 0.4 | 3G3M1-AB002 | HND | 10A (600Vac) |
| | | 3G3M1-AB004 | HHD | 10A (600Vac) |
| | 0.75 | 3G3M1-AB004 | HND | 15A (600Vac) |
| | | 3G3M1-AB007 | HHD | 20A (600Vac) |
| | 1.1 | 3G3M1-AB007 | HND | 30A (600Vac) |
| | 1.5 | 3G3M1-AB015 | HHD | 30A (600Vac) |
| | 2.2 | 3G3M1-AB015 | HND | 40A (600Vac) |
| | | 3G3M1-AB022 | HHD | 50A (600Vac) |
| | 3 | 3G3M1-AB022 | HND | 60A (600Vac) |
| 3.7 | 3G3M1-AB037 | HHD | 80A (600Vac) | |

| Power supply voltage | Standard applicable motor (kW) | Inverter model | HHD/HD HND/ND modes | Inverse time circuit breaker rating (Max. A] SCCR=100kA |
|--------------------------------|--------------------------------|----------------|---------------------|---|
| Three phase 200 V Vmin=240 Vac | 0.2 | 3G3M1-A2002 | HHD | 15A |
| | 0.4 | 3G3M1-A2002 | HND | 15A |
| | | 3G3M1-A2004 | HHD | 15A |
| | 0.75 | 3G3M1-A2004 | HND | 15A |
| | | 3G3M1-A2007 | HHD | 15A |
| | 1.1 | 3G3M1-A2007 | HND | 15A |
| | 1.5 | 3G3M1-A2015 | HHD | 20A |
| | 2.2 | 3G3M1-A2015 | HND | 20A |
| | | 3G3M1-A2022 | HHD | 30A |
| | 3 | 3G3M1-A2022 | HND | 30A |
| | 3.7 | 3G3M1-A2037 | HHD | 50A |
| | 5.5 | 3G3M1-A2037 | HND | 50A |
| | | 3G3M1-A2055 | HHD | 80A |
| | 7.5 | 3G3M1-A2055 | HND | 80A |
| | | 3G3M1-A2075 | HHD | 100A |
| | 11 | 3G3M1-A2075 | HND | 100A |
| | | 3G3M1-A2110 | HHD | 125A |
| | 15 | 3G3M1-A2110 | HND | 125A |
| | | 3G3M1-A2150 | HHD | 150A |
| | 18.5 | 3G3M1-A2150 | HND | 150A |
| 3G3M1-A2185 | | HHD | 175A | |
| 22 | 3G3M1-A2185 | HND | 175A | |

| Power supply voltage | Standard applicable motor (kW) | Inverter model | HND/HHD modes | Inverse time circuit breaker rating [Max. A] SCCR=100kA |
|--------------------------------------|--------------------------------|----------------|---------------|---|
| Three phase 400 V Vmin=480 Vac | 0.4 | 3G3M1-A4004 | HHD | 15A |
| | 0.75 | 3G3M1-A4004 | HD/HND | 15A |
| | | 3G3M1-A4004 | ND | 15A |
| | | 3G3M1-A4007 | HHD | 15A |
| | 1.1 | 3G3M1-A4007 | HD/HND | 15A |
| | 1.5 | 3G3M1-A4007 | ND | 15A |
| | | 3G3M1-A4015 | HHD | 15A |
| | 2.2 | 3G3M1-A4015 | HD/HND | 15A |
| | | 3G3M1-A4015 | ND | 15A |
| | | 3G3M1-A4022 | HHD | 20A |
| | 3 | 3G3M1-A4022 | HD/HND/ND | 20A |
| | | 3G3M1-A4030 | HHD | 30A |
| | 3.7 | 3G3M1-A4030 | HD/HND/ND | 30A |
| | | 3G3M1-A4040 | HHD | 30A |
| | 5.5 | 3G3M1-A4040 | HD/HND/ND | 30A |
| | | 3G3M1-A4055 | HHD | 50A |
| | 7.5 | 3G3M1-A4055 | HD/HND | 50A |
| | | 3G3M1-A4055 | ND | 50A |
| | | 3G3M1-A4075 | HHD | 70A |
| | 11 | 3G3M1-A4075 | HD/HND | 70A |
| | | 3G3M1-A4075 | ND | 70A |
| | | 3G3M1-A4110 | HHD | 80A |
| | 15 | 3G3M1-A4075 | ND | 70A |
| | | 3G3M1-A4110 | HD/HND | 80A |
| | | 3G3M1-A4150 | HHD | 100A |
| | 18.5 | 3G3M1-A4110 | ND | 80A |
| | | 3G3M1-A4150 | HD/HND | 100A |
| | | 3G3M1-A4185 | HHD | 125A |
| 22 | 3G3M1-A4150 | ND | 100A | |
| | 3G3M1-A4185 | HD/HND | 125A | |
| | 3G3M1-A4220 | HHD | 150A | |
| 30 | 3G3M1-A4185 | ND | 125A | |
| | 3G3M1-A4220 | HD/HND | 150A | |
| 37 | 3G3M1-A4220 | ND | 150A | |

| Power supply voltage | Standard applicable motor (kW) | Inverter model | HHD/HD HND/ND modes | Inverse time circuit breaker rating (Max. A) SCCR=100kA |
|---------------------------------------|--------------------------------|----------------|---------------------|---|
| Single phase 200 V Vmin=240 Vac | 0.2 | 3G3M1-AB002 | HHD | 15A |
| | 0.4 | 3G3M1-AB002 | HND | 15A |
| | | 3G3M1-AB004 | HHD | 15A |
| | 0.75 | 3G3M1-AB004 | HND | 15A |
| | | 3G3M1-AB007 | HHD | 30A |
| | 1.1 | 3G3M1-AB007 | HND | 30A |
| | 1.5 | 3G3M1-AB015 | HHD | 40A |
| | 2.2 | 3G3M1-AB015 | HND | 40A |
| | | 3G3M1-AB022 | HHD | 40A |
| | 3 | 3G3M1-AB022 | HND | 40A |
| | 3.7 | 3G3M1-AB037 | HHD | 70A |

Ordering information



M1 drive

| Voltage | Specifications | | | | | | | | Model |
|-----------------------|----------------|-------------------|----------------|-------------------|----------------|-------------------|----------------|-------------------|-------------|
| | ND | | HD | | HND | | HHD | | |
| | Max motor (kW) | Rated current (A) | Max motor (kW) | Rated current (A) | Max motor (kW) | Rated current (A) | Max motor (kW) | Rated current (A) | |
| Single phase 200 V | | | | | 0.4 | 1.9 | 0.2 | 1.6 | 3G3M1-AB002 |
| | | | | | 0.55 | 3.5 | 0.4 | 3.0 | 3G3M1-AB004 |
| | | | | | 1.1 | 5.3 | 0.75 | 5.0 | 3G3M1-AB007 |
| | | | | | 2.2 | 9.6 | 1.5 | 8.0 | 3G3M1-AB015 |
| | | | | | 3.0 | 11.2 | 2.2 | 11.0 | 3G3M1-AB022 |
| | | | | | - | - | 3.7 | 17.5 | 3G3M1-AB037 |
| Three phase 200 V | | | | | 0.4 | 2.0 | 0.2 | 1.6 | 3G3M1-A2002 |
| | | | | | 0.75 | 3.5 | 0.4 | 3.0 | 3G3M1-A2004 |
| | | | | | 1.1 | 6.0 | 0.75 | 5.0 | 3G3M1-A2007 |
| | | | | | 2.2 | 9.6 | 1.5 | 8.0 | 3G3M1-A2015 |
| | | | | | 3.0 | 12 | 2.2 | 11.0 | 3G3M1-A2022 |
| | | | | | 5.5 | 19.6 | 3.7 | 17.5 | 3G3M1-A2037 |
| | | | | | 7.5 | 30 | 5.5 | 25.0 | 3G3M1-A2055 |
| | | | | | 11.0 | 40 | 7.5 | 33 | 3G3M1-A2075 |
| | | | | | 15.0 | 56 | 11.0 | 47 | 3G3M1-A2110 |
| | | | | | 18.5 | 69 | 15.0 | 60 | 3G3M1-A2150 |
| Three phase 400 V | 0.75 | 2.1 | 0.75 | 1.8 | 0.75 | 2.1 | 0.4 | 1.8 | 3G3M1-A4004 |
| | 1.5 | 4.1 | 1.1 | 3.4 | 1.1 | 4.1 | 0.75 | 3.4 | 3G3M1-A4007 |
| | 2.2 | 5.5 | 2.2 | 5.0 | 2.2 | 5.5 | 1.5 | 4.8 | 3G3M1-A4015 |
| | 3.0 | 6.9 | 3.0 | 6.3 | 3.0 | 6.9 | 2.2 | 5.5 | 3G3M1-A4022 |
| | 4.0 | 9.2 | 4.0 | 8.8 | 4.0 | 8.8 | 3.0 | 7.2 | 3G3M1-A4030 |
| | 5.5 | 12.0 | 5.5 | 11.1 | 5.5 | 11.1 | 4.0 | 9.2 | 3G3M1-A4040 |
| | 11.0 | 21.5 | 7.5 | 17.5 | 7.5 | 17.5 | 5.5 | 14.8 | 3G3M1-A4055 |
| | 15.0 | 28.5 | 11.0 | 23.0 | 11.0 | 23.0 | 7.5 | 18.0 | 3G3M1-A4075 |
| | 18.5 | 37.0 | 15.0 | 31.0 | 15.0 | 31.0 | 11.0 | 24.0 | 3G3M1-A4110 |
| | 22.0 | 44.0 | 18.5 | 38.0 | 18.5 | 38.0 | 15.0 | 31.0 | 3G3M1-A4150 |
| | 30.0 | 59.0 | 22.0 | 45.0 | 22.0 | 45.0 | 18.5 | 39.0 | 3G3M1-A4185 |
| | 37.0 | 72.0 | 30.0 | 60.0 | 30.0 | 60.0 | 22.0 | 45.0 | 3G3M1-A4220 |

Dual Encoder option board

| Reference | Description |
|--------------|--|
| 3G3A1-PG05-E | M1 Standard dual encoder board, 5 V open collector and complementary output encoders. 30 kHz Open collector, complementary |
| 3G3A1-PG15-E | M1 Standard dual encoder board, 15 V open collector and complementary output encoders 30 kHz Open collector, 100 kHz complementary up to 30m |

Remote operator mounting

| Reference | Description |
|-----------|---|
| CBAD-CP | Keypad adapter operator for remote control connection |

1 Line filters

| Drive | | Standard line filter | | Low leakage line filter | |
|--------------------|--------------------|----------------------|-------------|-------------------------|-------------|
| Voltage | Model 3G3M1-A□-EMP | Reference | Current (A) | Reference | Current (A) |
| Single-phase 200 V | B002 to B007 | AX-FIC1014-SE | 13.8 | AX-FIC1014-SE-LL | 13.8 |
| | B015 | AX-FIC1021-SE | 20.2 | AX-FIC1021-SE-LL | 20.2 |
| | B022 | AX-FIC1026-SE | 26 | AX-FIC1026-SE-LL | 26 |
| | B037 | AX-FIC1045-SE | 45.4 | AX-FIC1045-SE-LL | 45.4 |
| Three-phase 200 V | 2002/2004/2007 | AX-FIC2008-SE | 6.7* | - | |
| | 2015/2022 | AX-FIC2018-SE | 17.9* | | |
| | 2037 | AX-FIC2029-SE | 28.5* | | |
| | 2055/2075 | AX-FIC2061-SE | 60.7* | | |
| | 2110/2150 | AX-FIC2097-SE | 97* | | |
| | 2185 | AXFIC2112-SE | 112* | | |
| Three-phase 400 V | 4004/4007 | AX-FIC4004-SE | 4.8* | AX-FIC4004-SE-LL | 4.8* |
| | 4015/4022 | AX-FIC4011-SE | 11.3* | AX-FIC4011-SE-LL | 11.3* |
| | 4030/4040 | AX-FIC4017-SE | 16.8* | AX-FIC4017-SE-LL | 16.8* |
| | 4055/4075 | AX-FIC4044-SE | 43.8* | AX-FIC4044-SE-LL | 43.8* |
| | 4110/4150 | AX-FIC4061-SE | 60.6* | AX-FIC4061-SE-LL | 60.6* |
| | 4185/4220 | AX-FIC4095-SE | 94.3* | AX-FIC4095-SE-LL | 94.3* |

Note: Smaller filter could be used in some cases if DC reactor is used.

*1: Values for 40°C ambient temperature

| 400 V Three phase | | | | | | 200 V Single phase | | | | | |
|-------------------|--------|------------------|------|------|----------|--------------------|------------------|------------------|------|-------|----------|
| 3G3M1-A□ | Rating | Reference | mH | A | Losses W | 3G3M1-A□ | Rating | Reference | mH | A | Losses W |
| 4004 | HHD | AX-RC43000020-DE | 43.0 | 2.0 | 17 | B002 | HHD | AX-RC10700032-DE | 10.7 | 3.2 | 14 |
| | HD/HND | AX-RC27000030-DE | 27.0 | 3.0 | 21 | | HND | AX-RC06750061-DE | 6.75 | 6.1 | 18 |
| | ND | AX-RC27000030-DE | 27.0 | 3.0 | 21 | B004 | HHD | AX-RC06750061-DE | 6.75 | 6.1 | 18 |
| 4007 | HHD | AX-RC27000030-DE | 27.0 | 3.0 | 21 | B007 | HND | AX-RC03510093-DE | 3.51 | 9.3 | 20 |
| | HD/HND | AX-RC14000047-DE | 14.0 | 4.7 | 25 | | HHD | AX-RC03510093-DE | 3.51 | 9.3 | 20 |
| | ND | AX-RC14000047-DE | 14.0 | 4.7 | 25 | HND | AX-RC02510138-DE | 2.51 | 13.8 | 24 | |
| 4015 | HHD | AX-RC14000047-DE | 14.0 | 4.7 | 25 | B015 | HHD | AX-RC02510138-DE | 2.51 | 13.8 | 24 |
| | HD/HND | AX-RC10100069-DE | 10.1 | 6.9 | 28 | | HND | AX-RC01600223-DE | 1.60 | 22.3 | 30 |
| | ND | AX-RC10100069-DE | 10.1 | 6.9 | 28 | B022 | HHD | AX-RC01600223-DE | 1.60 | 22.3 | 30 |
| 4022 | HHD | AX-RC10100069-DE | 10.1 | 6.9 | 32 | B037 | HND | AX-RC01110309-DE | 1.11 | 30.9 | 40 |
| | HD/HND | AX-RC06400116-DE | 6.4 | 11.6 | 32 | | HHD | AX-RC01110309-DE | 1.11 | 30.9 | 40 |
| | ND | AX-RC06400116-DE | 6.4 | 11.6 | 32 | HND | - | | | | |
| 4030 | HHD | AX-RC06400116-DE | 6.4 | 11.6 | 32 | 200 V Three phase | | | | | |
| | HD/HND | AX-RC06400116-DE | 6.4 | 11.6 | 32 | 2002 | HHD | AX-RC21400016-DE | 21.4 | 1.6 | 7 |
| | ND | AX-RC06400116-DE | 6.4 | 11.6 | 32 | | HND | AX-RC10700032-DE | 10.7 | 3.2 | 14 |
| 4040 | HHD | AX-RC06400116-DE | 6.4 | 11.6 | 32 | 2004 | HHD | AX-RC10700032-DE | 10.7 | 3.2 | 14 |
| | HD/HND | AX-RC04410167-DE | 4.4 | 16.7 | 40 | | HND | AX-RC06750061-DE | 6.75 | 6.1 | 18 |
| | ND | AX-RC04410167-DE | 4.4 | 16.7 | 40 | 2007 | HHD | AX-RC06750061-DE | 6.75 | 6.1 | 18 |
| 4055 | HHD | AX-RC04410167-DE | 4.4 | 16.7 | 40 | 2015 | HND | AX-RC03510093-DE | 3.51 | 9.3 | 20 |
| | HD/HND | AX-RC03350219-DE | 3.35 | 21.9 | 47 | | HHD | AX-RC03510093-DE | 3.51 | 9.3 | 20 |
| | ND | AX-RC02330307-DE | 2.33 | 30.7 | 63 | HND | AX-RC02510138-DE | 2.51 | 13.8 | 24 | |
| 4075 | HHD | AX-RC03350219-DE | 3.35 | 21.9 | 47 | 2022 | HHD | AX-RC02510138-DE | 2.51 | 13.8 | 24 |
| | HD/HND | AX-RC02330307-DE | 2.33 | 30.7 | 63 | | HND | AX-RC01600223-DE | 1.60 | 22.3 | 30 |
| | ND | AX-RC01750430-DE | 1.75 | 43.0 | 77 | 2037 | HHD | AX-RC01600223-DE | 1.60 | 22.3 | 30 |
| 4110 | HHD | AX-RC02330307-DE | 2.33 | 30.7 | 63 | 2055 | HND | AX-RC01110309-DE | 1.11 | 30.9 | 40 |
| | HD/HND | AX-RC01750430-DE | 1.75 | 43.0 | 77 | | HHD | AX-RC01110309-DE | 1.11 | 30.9 | 40 |
| | ND | AX-RC01750430-DE | 1.75 | 43.0 | 77 | HND | AX-RC00840437-DE | 0.84 | 43.7 | 46 | |
| 4150 | HHD | AX-RC01750430-DE | 1.75 | 43.0 | 77 | 2075 | HHD | AX-RC00840437-DE | 0.84 | 43.7 | 46 |
| | HD/HND | AX-RC01750430-DE | 1.75 | 43.0 | 77 | | HND | AX-RC00590614-DE | 0.59 | 61.4 | 60 |
| | ND | AX-RC01200644-DE | 1.20 | 64.4 | 99 | 2110 | HHD | AX-RC00590614-DE | 0.59 | 61.4 | 60 |
| 4185 | HHD | AX-RC01750430-DE | 1.75 | 43.0 | 77 | 2150 | HND | AX-RC00440859-DE | 0.44 | 85.9 | 75 |
| | HD/HND | AX-RC01200644-DE | 1.20 | 64.4 | 99 | | HHD | AX-RC00440859-DE | 0.44 | 85.9 | 75 |
| | ND | AX-RC00920797-DE | 0.92 | 79.7 | 111 | HND | AX-RC00440859-DE | 0.44 | 85.9 | 75 | |
| 4220 | HHD | AX-RC01200644-DE | 1.20 | 64.4 | 99 | 2185 | HHD | AX-RC00440859-DE | 0.44 | 85.9 | 75 |
| | HD/HND | AX-RC00920797-DE | 0.92 | 79.7 | 111 | | HND | AX-RC00301275-DE | 0.3 | 127.5 | 107 |

1 Input AC reactor (Considering DC reactor is installed)

| 400 V Three phase | | | | | | 200 V Single phase | | | | | |
|-------------------|--------|-------------------|------|-------|------------|--------------------|-------------------|--------------------|--------------------|-------|------------|
| 3G3M1-A□ | Rating | Reference | mH | A | Losses (w) | 3G3M1-A□ | Rating | Reference | mH | A | Losses (W) |
| 4004 | HHD | AX-RAI07700042-DE | 7.7 | 4.2 | 32 | B002 | HHD | AX-RAI02000070-DE | 2.0 | 7.0 | 14 |
| | HD/HND | AX-RAI07700042-DE | 7.7 | 4.2 | 32 | | HND | AX-RAI02000070-DE | 2.0 | 7.0 | 14 |
| | ND | AX-RAI07700042-DE | 7.7 | 4.2 | 32 | | B004 | HHD | AX-RAI02000070-DE | 2.0 | 7.0 |
| 4007 | HHD | AX-RAI03700040-DE | 3.7 | 4.0 | 18 | HND | | AX-RAI02000070-DE | 2.0 | 7.0 | 14 |
| | HD/HND | AX-RAI03700040-DE | 3.7 | 4.0 | 18 | B007 | HHD | AX-RAI01700140-DE | 1.7 | 14.0 | 22 |
| | ND | AX-RAI03700040-DE | 3.7 | 4.0 | 18 | | HND | AX-RAI01700140-DE | 1.7 | 14.0 | 22 |
| 4015 | HHD | AX-RAI02800080-DE | 2.8 | 8.0 | 31 | B015 | HHD | AX-RAI01700140-DE | 1.7 | 14.0 | 22 |
| | HD/HND | AX-RAI02800080-DE | 2.8 | 8.0 | 31 | | HND | AX-RAI01200200-DE | 1.2 | 20.0 | 24 |
| | ND | AX-RAI02800080-DE | 2.8 | 8.0 | 31 | B022 | HHD | AX-RAI01200200-DE | 1.2 | 20.0 | 24 |
| 4022 | HHD | AX-RAI01630090-DE | 1.63 | 9.0 | 40 | | B037 | HND | AX-RAI00210330-DE* | 0.21 | 33.0 |
| | HD/HND | AX-RAI01630090-DE | 1.63 | 9.0 | 40 | HHD | | AX-RAI00210330-DE* | 0.21 | 33.0 | 69 |
| | ND | AX-RAI01630090-DE | 1.63 | 9.0 | 40 | 200 V Three phase | | | | | |
| 4030 | HHD | AX-RAI01630090-DE | 1.63 | 9.0 | 40 | | | | | | |
| | HD/HND | AX-RAI01630090-DE | 1.63 | 9.0 | 40 | | | | | | |
| | ND | AX-RAI01630090-DE | 1.63 | 9.0 | 40 | | | | | | |
| 4040 | HHD | AX-RAI01300170-DE | 1.30 | 17.0 | 67 | 2002 | HHD | AX-RAI02920030-DE | 2.92 | 3.0 | 8 |
| | HD/HND | AX-RAI01300170-DE | 1.30 | 17.0 | 67 | | HND | AX-RAI02920030-DE | 2.92 | 3.0 | 8 |
| | ND | AX-RAI01300170-DE | 1.30 | 17.0 | 67 | 2004 | HHD | AX-RAI01570050-DE | 1.57 | 5.0 | 12 |
| 4055 | HHD | AX-RAI00810180-DE | 0.81 | 18.0 | 79 | | HND | AX-RAI01570050-DE | 1.57 | 5.0 | 12 |
| | HD/HND | AX-RAI00810180-DE | 0.81 | 18.0 | 79 | 2007 | HHD | AX-RAI01570050-DE | 1.57 | 5.0 | 12 |
| | ND | AX-RAI00740335-DE | 0.74 | 33.5 | 79 | | HND | AX-RAI00940080-DE | 0.94 | 8.0 | 18 |
| 4075 | HHD | AX-RAI00810180-DE | 0.81 | 18.0 | 79 | 2015 | HHD | AX-RAI00940080-DE | 0.94 | 8.0 | 18 |
| | HD/HND | AX-RAI00740335-DE | 0.74 | 33.5 | 240 | | HND | AX-RAI00670110-DE | 0.67 | 11.0 | 24 |
| | ND | AX-RAI00440300-DE | 0.44 | 30.0 | 119 | 2022 | HHD | AX-RAI00670110-DE | 0.67 | 11.0 | 24 |
| 4110 | HHD | AX-RAI00740335-DE | 0.74 | 33.5 | 240 | | 2037 | HND | AX-RAI00450170-DE | 0.45 | 17.0 |
| | HD/HND | AX-RAI00440300-DE | 0.44 | 30.0 | 119 | HHD | | AX-RAI00450170-DE | 0.45 | 17.0 | 39 |
| | ND | AX-RAI00360500-DE | 0.36 | 50.0 | 85 | 2055 | HND | AX-RAI00290250-DE | 0.29 | 25.0 | 54 |
| 4150 | HHD | AX-RAI00440300-DE | 0.44 | 30.0 | 119 | | HHD | AX-RAI00290250-DE | 0.29 | 25.0 | 54 |
| | HD/HND | AX-RAI00360500-DE | 0.36 | 50.0 | 85 | HND | AX-RAI00210330-DE | 0.21 | 33.0 | 69 | |
| | ND | AX-RAI00300450-DE | 0.30 | 45.0 | 182 | 2075 | HHD | AX-RAI00210330-DE | 0.21 | 33.0 | 69 |
| 4185 | HHD | AX-RAI00360500-DE | 0.36 | 50.0 | 85 | | HND | AX-RAI00180670-DE | 0.18 | 67.0 | 71 |
| | HD/HND | AX-RAI00300450-DE | 0.30 | 45.0 | 182 | 2110 | HHD | AX-RAI00180670-DE | 0.18 | 67.0 | 71 |
| | ND | AX-RAI00191150-DE | 0.19 | 115.0 | 177 | | HND | AX-RAI00110600-DE | 0.11 | 60.0 | 119 |
| 4220 | HHD | AX-RAI00290780-DE | 0.29 | 78.0 | 116 | 2150 | HHD | AX-RAI00110600-DE | 0.11 | 60.0 | 119 |
| | HD/HND | AX-RAI00191150-DE | 0.19 | 115.0 | 177 | | HND | AX-RAI00091000-DE | 0.09 | 100.0 | 84 |
| | ND | AX-RAI00191150-DE | 0.19 | 115.0 | 177 | 2185 | HHD | AX-RAI00091000-DE | 0.09 | 100.0 | 84 |
| | | | | | HND | | AX-RAI00091000-DE | 0.09 | 100.0 | 84 | |

Note: This table corresponds with ND/HND rating. When using HD in some case it could be possible to select a smaller size.

* This is a 3 phase reactor where only two of the phases are used.

1 Output AC reactors

| 200 V | | | | | Three-phase 400 V | | | | |
|-----------|--------|-------------------|------|------|-------------------|-------------------|-------------------|------|------|
| 3G3M1-A□ | Rating | Output AC reactor | mH | A | 3G3M1-A□ | Rating | Output AC reactor | mH | A |
| B002/2002 | HHD | AX-RAO11500026-DE | 11.5 | 2.6 | 4004 | HHD | AX-RAO16300038-DE | 16.3 | 3.8 |
| | HND | AX-RAO11500026-DE | 11.5 | 2.6 | | HD/HND | AX-RAO16300038-DE | 16.3 | 3.8 |
| B004/2004 | HHD | AX-RAO07600042-DE | 7.6 | 4.2 | 4007 | ND | AX-RAO16300038-DE | 16.3 | 3.8 |
| | HND | AX-RAO07600042-DE | 7.6 | 4.2 | | HHD | AX-RAO16300038-DE | 16.3 | 3.8 |
| B007/2007 | HHD | AX-RAO04100075-DE | 4.1 | 7.5 | 4015 | HD/HND | AX-RAO11800053-DE | 11.8 | 5.3 |
| | HND | AX-RAO04100075-DE | 4.1 | 7.5 | | ND | AX-RAO11800053-DE | 11.8 | 5.3 |
| B015/2015 | HHD | AX-RAO03000105-DE | 3.0 | 10.5 | 4022 | HHD | AX-RAO11800053-DE | 11.8 | 5.3 |
| | HND | AX-RAO03000105-DE | 3.0 | 10.5 | | HD/HND | AX-RAO07300080-DE | 7.3 | 8.0 |
| B0222 | HHD | AX-RAO01830160-DE | 1.8 | 16.0 | 4030 | ND | AX-RAO07300080-DE | 7.3 | 8.0 |
| | HND | AX-RAO01830160-DE | 1.8 | 16.0 | | HHD | AX-RAO07300080-DE | 7.3 | 8.0 |
| B037/2037 | HHD | AX-RAO01150220-DE | 1.15 | 22.0 | 4040 | HD/HND | AX-RAO07300080-DE | 7.3 | 8.0 |
| | HND | AX-RAO01150220-DE | 1.15 | 22.0 | | ND | AX-RAO07300080-DE | 7.3 | 8.0 |
| 2055 | HHD | AX-RAO00950320-DE | 0.95 | 32.0 | 4055 | HHD | AX-RAO04600110-DE | 4.6 | 11.0 |
| | HND | AX-RAO00950320-DE | 0.95 | 32.0 | | HD/HND | AX-RAO04600110-DE | 4.6 | 11.0 |
| 2075 | HHD | AX-RAO00630430-DE | 0.63 | 43.0 | 4075 | ND | AX-RAO04600110-DE | 4.6 | 11.0 |
| | HND | AX-RAO00630430-DE | 0.63 | 43.0 | | HHD | AX-RAO04600110-DE | 4.6 | 11.0 |
| 2110 | HHD | AX-RAO00490640-DE | 0.49 | 64.0 | 4110 | HD/HND | AX-RAO03600160-DE | 3.6 | 16.0 |
| | HND | AX-RAO00490640-DE | 0.49 | 64.0 | | ND | AX-RAO03600160-DE | 3.6 | 16.0 |
| 2150 | HHD | AX-RAO00490640-DE | 0.49 | 64.0 | 4150 | HHD | AX-RAO03600160-DE | 3.6 | 16.0 |
| | HND | AX-RAO00390800-DE | 0.39 | 80.0 | | HD/HND | AX-RAO02500220-DE | 2.5 | 22.0 |
| 2185 | HHD | AX-RAO00390800-DE | 0.39 | 80.0 | 4185 | ND | AX-RAO02500220-DE | 2.5 | 22.0 |
| | HND | AX-RAO00330950-DE | 0.33 | 95.0 | | HHD | AX-RAO02500220-DE | 2.5 | 22.0 |
| - | | | | | 4220 | HD/HND | AX-RAO02000320-DE | 0.20 | 32.0 |
| | | | | | | ND | AX-RAO02000320-DE | 0.20 | 32.0 |
| | | | | | | HHD | AX-RAO02000320-DE | 0.20 | 32.0 |
| | | | | | 4150 | HD/HND | AX-RAO02000320-DE | 0.20 | 32.0 |
| | | | | | | ND | AX-RAO01650400-DE | 0.16 | 40.0 |
| | | | | | | HHD | AX-RAO01650400-DE | 0.16 | 40.0 |
| | | | | | 4185 | HD/HND | AX-RAO01650400-DE | 0.16 | 40.0 |
| | | | | | | ND | AX-RAO01300480-DE | 0.13 | 48.0 |
| | | | | | | HHD | AX-RAO01300480-DE | 0.13 | 48.0 |
| | | | | | 4220 | HD/HND | AX-RAO01300480-DE | 0.13 | 48.0 |
| | | | | | | ND | AX-RAO00800750-DE | 0.08 | 75.0 |
| | | | | | | HHD | AX-RAO00800750-DE | 0.08 | 75.0 |
| | | | | | HD/HND | AX-RAO00800750-DE | 0.08 | 75.0 | |
| | | | | | ND | AX-RAO00800750-DE | 0.08 | 75.0 | |
| | | | | | HHD | AX-RAO00800750-DE | 0.08 | 75.0 | |

Note: This table corresponds with ND/HND rating. When using HD in some case it could be possible to select a smaller size.

1 Chokes

| Diameter | Description | Model |
|----------|----------------------------|---------------|
| 21 | For 2.2 KW motors or below | AX-FER2102-PE |
| 28 | For 15 KW motors or below | AX-FER2815-PE |
| 50 | For 45 KW motors or below | AX-FER5045-PE |

2 Accessories

Cable

| Description | Functions | Model |
|-------------|---|-------|
| USB cable | Use a commercially available USB cable that is double-shielded, gold-plated and supports USB 2.0. The Micro B type USB cable can be used. | - |

Shield clamps ordering

| Description | Model |
|--------------------------------------|----------|
| AB002..AB007 and A2002..A2007 | AX-M1-S1 |
| AB015, A2007..A2022 and A4004..A4022 | AX-M1-S2 |
| AB022, A2037, and A4030..A4040 | AX-M1-S3 |
| AB037, A2055..A2075 and A4055..A4075 | AX-M1-S4 |
| A2110..A2150 and A4110..A4150 | AX-M1-S5 |
| A2185 and A4185..A4220 | AX-M1-S6 |

Software tools

| Description | Functions | Number licenses | Media | Model |
|---|--|-----------------|----------------------------|------------------|
| Sysmac Studio Standard Edition Ver.1.XX | The Sysmac Studio is the software that provides an integrated environment for setting, programming, debugging and maintenance of machine automation controllers including NJ/NX-series CPU Units, NY-series Industrial PC, EtherCAT Slaves, and HMI. Sysmac Studio runs on the following OS: Windows 7 (32-bit/64-bit version)/Windows 8.1 (32-bit/64-bit version) Windows 10 (32-bit/64-bit version)/Windows 11 (64-bit version) This software provides functions of the Vision Edition. Refer to your local OMRON website for details such as supported models and functions. | (Media only) | Sysmac Studio (32 bit) DVD | SYSMAC-SE200D |
| | | (Media only) | Sysmac Studio (64 bit) DVD | SYSMAC-SE200D-64 |
| | | 1 license | - | SYSMAC-SE201L |
| Sysmac Studio Drive Edition Ver.1.XX | Sysmac Studio Drive Edition is a limited license that provides selected functions required for 1S-series Servo, G5-series Servo and M1 Series Inverter System settings. Because this product is a license only, you need the Sysmac Studio Standard Edition DVD media to install it. | 1 license | - | SYSMAC-DE001L |
| Omron Drives Mobile App | Windows and Android application that allows to communicate through USB with the drive for copy and paste parameter or edit the protocol parameters. Available in Google Play Store and Microsoft Store. | Free | - | Omron Drives |

3 Braking resistor

| Voltage | 3G3M1-A□ | Conn. min. resistance | Resistor fast stop (10s not cyclic) | | | Braking resistor (3% ED, 10 sec) | | | Braking resistor (10% ED, 10sec) | | |
|---------------|----------|-----------------------|-------------------------------------|----------------|------------------|----------------------------------|----------------|------------------|----------------------------------|----------------|-------|
| | | | Model | Specifications | | Model | Specifications | | Model | Specifications | |
| 1 phase 200 V | B002 | 100 W | AX-REM00K1100-IE | 100 W | 100 W | AX-REM00K1100-IE | 100 W | 100 W | AX-REM00K2100-IE | 200 W | 100 W |
| | B004 | | AX-REM00K1100-IE | 100 W | 100 W | AX-REM00K1100-IE | 100 W | 100 W | AX-REM00K2100-IE | 200 W | 100 W |
| | B007 | | AX-REM00K1100-IE | 100 W | 100 W | AX-REM00K1100-IE | 100 W | 100 W | AX-REM00K2100-IE | 200 W | 100 W |
| | B015 | 40 W | AX-REM00K2040-IE | 200 W | 40 W | AX-REM00K2050-IE | 200 W | 50 W | AX-REM00K4050-IE | 400 W | 50 W |
| | B022 | | AX-REM00K2040-IE | 200 W | 40 W | AX-REM00K2050-IE | 200 W | 50 W | AX-REM00K4050-IE | 400 W | 50 W |
| | B037 | | AX-REM00K4040-IE | 400 W | 40 W | AX-REM00K4050-IE | 400 W | 50 W | AX-REM00K6050-IE | 600 W | 50 W |
| 3 phase 400 V | 4004 | 200 W | AX-REM00K1200-IE | 100 W | 200 W | AX-REM00K1200-IE | 100 W | 200 W | AX-REM00K4200-IE | 400 W | 200 W |
| | 4007 | | AX-REM00K1200-IE | 100 W | 200 W | AX-REM00K1200-IE | 100 W | 200 W | AX-REM00K4200-IE | 400 W | 200 W |
| | 4015 | 160 W | AX-REM00K3160-IE | 300 W | 160 W | AX-REM00K1200-IE | 100 W | 200 W | AX-REM00K4200-IE | 400 W | 200 W |
| | 4022 | | AX-REM00K3160-IE | 300 W | 160 W | AX-REM00K1200-IE | 100 W | 200 W | AX-REM00K4200-IE | 400 W | 200 W |
| | 4030 | 130 W | AX-REM00K4130-IE | 400 W | 130 W | AX-REM00K2150-IE | 200 W | 150 W | AX-REM00K6150-IE | 600 W | 150 W |
| | 4040 | | AX-REM00K4130-IE | 400 W | 130 W | AX-REM00K2150-IE | 200 W | 150 W | AX-REM00K6150-IE | 600 W | 150 W |
| | 4055 | 80 W | AX-REM00K6080-IE | 600 W | 80 W | AX-REM00K3100-IE | 300 W | 100 W | AX-REM00K9100-IE | 900 W | 100 W |
| | 4075 | 60 W | AX-REM00K9060-IE | 900 W | 60 W | AX-REM00K4070-IE | 400 W | 70 W | AX-REM01K3070-IE | 1300 W | 70 W |
| | 4110 | 40 W | AX-REM00K9040-IE | 900 W | 40 W | AX-REM00K4050-IE | 400 W | 50 W | AX-REM01K9050-IE | 1900 W | 50 W |
| | 4150 | 34.4 W | AX-REM00K9040-IE | 900 W | 40 W | AX-REM00K4050-IE | 400 W | 50 W | AX-REM01K9050-IE | 1900 W | 50 W |
| | 4185 | 16 W | AX-REM01K9017-IE | 1900 W | 17 W | AX-REM01K1020-IE | 1100 W | 20 W | AX-REM03K5020-IE | 3500 W | 20 W |
| | 4220 | | AX-REM01K9017-IE | 1900 W | 17 W | AX-REM01K1020-IE | 1100 W | 20 W | AX-REM03K5020-IE | 3500 W | 20 W |
| 3 phase 200 V | 2002 | 100 W | AX-REM00K1100-IE | 100 W | 100 W | AX-REM00K1100-IE | 100 W | 100 W | AX-REM00K2100-IE | 200 W | 100 W |
| | 2004 | | AX-REM00K1100-IE | 100 W | 100 W | AX-REM00K1100-IE | 100 W | 100 W | AX-REM00K2100-IE | 200 W | 100 W |
| | 2007 | | AX-REM00K1100-IE | 100 W | 100 W | AX-REM00K1100-IE | 100 W | 100 W | AX-REM00K2100-IE | 200 W | 100 W |
| | 2015 | 40 W | AX-REM00K2040-IE | 200 W | 40 W | AX-REM00K2050-IE | 200 W | 50 W | AX-REM00K4050-IE | 400 W | 50 W |
| | 2022 | | AX-REM00K2040-IE | 200 W | 40 W | AX-REM00K2050-IE | 200 W | 50 W | AX-REM00K4050-IE | 400 W | 50 W |
| | 2037 | 33 W | AX-REM00K4035-IE | 400 W | 35 W | AX-REM00K2040-IE | 200 W | 40 W | AX-REM00K4040-IE | 400 W | 40 W |
| | 2055 | 20 W | AX-REM00K4020-IE | 400 W | 20 W | AX-REM00K3025-IE | 300 W | 25 W | AX-REM00K6030-IE | 600 W | 30 W |
| | 2075 | 15 W | AX-REM00K6015-IE | 600 W | 15 W | AX-REM00K4020-IE | 400 W | 20 W | AX-REM00K9020-IE | 900 W | 20 W |
| | 2110 | 10 W | AX-REM00K9010-IE | 900 W | 10 W | AX-REM00K6015-IE | 600 W | 15 W | AX-REM01K1015-IE | 1100 W | 15 W |
| | 2150 | 8.6 W | AX-REM00K9010-IE | 900 W | 10 W | AX-REM00K6015-IE | 600 W | 15 W | AX-REM01K1015-IE | 1100 W | 15 W |
| 2185 | 4 W | AX-REM02K1004-IE | 2000 W | 4 W | AX-REM00K9006-IE | 900 W | 6 W | AX-REM03K5006-IE | 3500 W | 6 W | |

ALL DIMENSIONS SHOWN ARE IN MILLIMETERS.
To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.