## OmROn

## MX2 INVERTER



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## OmROn

## Harmonised motor and machine control

The MX2 is specifically designed to drive machines. It has been developed to harmonise advanced motor and machine control. Thanks to its advanced design and algorithms the MX2 provides smooth control down to zero speed, plus precise operation for fast cyclic operations and torque control capability in open loop. The MX2 also gives you comprehensive functionality for machine control such as positioning, speed synchronisation and logic programming. The MX2 is fully integrated within the Omron smart automation platform. The MX2 is the child of a true leader in machine automation.


RoHS


TÜVRheinland

100\% Control...

High starting torque and torque control capability in open loop mode give you full control of your machine dynamics and performance. Options for all of the major fieldbus systems and a 24 VDC external supply keeps you in full control of your machine operation.

Safety is embedded in the MX2, according to ISO 13849-1, Cat 3, with two safety inputs and an Externa Device Monitoring (EDM) output.
No external contactors on the motor side are required, meaning simpler wiring for the user


Torque master
The MX2 delivers 200\% starting torque near stand-still ( 0.5 Hz ) and can operate in torque control in open loop mode. This allows the MX2 to be used in applications where closed loop AC vector drives were previously used.


## Easy network integration

Built-in RS485 Modbus communications and the possibility for integration in standard industrial networks, such as Dnet, Profibus, CANopen, CompoNet, ML-II or EtherCat makes the MX2 exceptionally easy to integrate.


External 24 VDC for continuous operation

With no additional hardware, a 24 VDC connection to the MX2 ensures the CPU is always in control, even if the main input is removed. This feature is vital in providing a controlled stop in emergency situations and in keeping the network communications operating.


Safety embedded; ISO 13849-1, cat 3

Dual contactors at the output of the inverter are no longer required Direct connection to a safety controller ensures compliance to ISO 13849-1, cat 3

Safety redundancy input


## EDM monitoring output

An External Device Monitoring (EDM) output confirms the safety status of the inverter, saving you the cost and wiring of external devices to carry out the same function.


Direct integration into the safety circuit

MX2 inverters can fit easily into the safety circuit. The safety inputs can be linked from one inverter to another without additional safety relays.

## Position and run!

The MX2 is a drive and position controller in one, ideal for modular machines where moderate positional accuracy is required. Speed synchronisation is also possible, with no additional programming required.

## Program and play!



## Speed synchronisation

With no external hardware required, and via standard parameter settings, speed synchronisation can be achieved. The MX2 will act as a speed follower to an external pulse generator/encoder signal up to 32 KHz .


Positioning functionality
Specially developed application functionality enables the MX2 to solve simple positioning tasks without the need for an external controller. Up to 8 positions, plus home, can be selected by the user, and furthermore, the MX2 can be switched between speed and position mode.


The MX2 gives you the power to create smart solutions using PLC functionality, as standard. Via an intuitive flow chart programming tool, you can create programs with up to 1000 lines of code and with 5 tasks running in parallel.


Intuitive and user friendly flow chart programming - Integrated in CX-Drive

Up to 1000 lines in a program
5 tasks can run in parallel


## 3G3MX2

## With Machine Automation Mentality

- Current vector Control.
- High Starting torque: $200 \%$ at 0.5 Hz .
- Double rating VT 120\%/1 min and CT 150\% /1 min.
- Speed range up to $1,000 \mathrm{~Hz}$.
- Positioning functionality.
- Safety embedded compliant with ISO 13849-1: 2006 (PLd)
(double input circuit and external device monitor)
- Modbus communications.

- PC Configuration tool: CX-Drive.


## Interpreting Model Numbers



## Ordering Information

## International Standards

- The standards are abbreviated as follows: U: UL, U1: UL (Class I Division 2 Products for Hazardous Locations), C: CSA, UC: cULus, UC1: cULus (Class I Division 2 Products for Hazardous Locations), CU: cUL, N: NK, L: Lloyd, and CE: EC Directives.
- Contact your OMRON representative for further details and applicable conditions for these standards.


## 3G3MX2 Inverter Models

| Rated voltage | Enclosure ratings | Max. applicable motor capacity |  | Model |
| :---: | :---: | :---: | :---: | :---: |
|  |  | CT: Heavy load | VT: Light load |  |
| 3-phase 200 VAC | IP20 | 0.1 kW | 0.2 kW | 3G3MX2-A2001 |
|  |  | 0.2 kW | 0.4 kW | 3G3MX2-A2002 |
|  |  | 0.4 kW | 0.75 kW | 3G3MX2-A2004 |
|  |  | 0.75 kW | 1.1 kW | 3G3MX2-A2007 |
|  |  | 1.5 kW | 2.2 kW | 3G3MX2-A2015 |
|  |  | 2.2 kW | 3.0 kW | 3G3MX2-A2022 |
|  |  | 3.7 kW | 5.5 kW | 3G3MX2-A2037 |
|  |  | 5.5 kW | 7.5 kW | 3G3MX2-A2055 |
|  |  | 7.5 kW | 11 kW | 3G3MX2-A2075 |
|  |  | 11 kW | 15 kW | 3G3MX2-A2110 |
|  |  | 15 kW | 18.5 kW | 3G3MX2-A2150 |
| 3-phase 400 VAC | IP20 | 0.4 kW | 0.75 kW | 3G3MX2-A4004 |
|  |  | 0.75 kW | 1.5 kW | 3G3MX2-A4007 |
|  |  | 1.5 kW | 2.2 kW | 3G3MX2-A4015 |
|  |  | 2.2 kW | 3.0 kW | 3G3MX2-A4022 |
|  |  | 3.0 kW | 4.0 kW | 3G3MX2-A4030 |
|  |  | 4.0 kW | 5.5 kW | 3G3MX2-A4040 |
|  |  | 5.5 kW | 7.5 kW | 3G3MX2-A4055 |
|  |  | 7.5 kW | 11 kW | 3G3MX2-A4075 |
|  |  | 11 kW | 15 kW | 3G3MX2-A4110 |
|  |  | 15 kW | 18.5 kW | 3G3MX2-A4150 |
| 1-phase 200 VAC | IP20 | 0.1 kW | 0.2 kW | 3G3MX2-AB001 |
|  |  | 0.2 kW | 0.4 kW | 3G3MX2-AB002 |
|  |  | 0.4 kW | 0.55 kW | 3G3MX2-AB004 |
|  |  | 0.75 kW | 1.1 kW | 3G3MX2-AB007 |
|  |  | 1.5 kW | 2.2 kW | 3G3MX2-AB015 |
|  |  | 2.2 kW | 3.0 kW | 3G3MX2-AB022 |

For option, refer to 15 page.

## Support Software

| Product name | Specifications | Number of licenses | Media | Model | Standards |
| :---: | :---: | :---: | :---: | :---: | :---: |
| FA Integrated Tool Package CX-OneVer. 4. | The CX-One is a package that integrates the Support Software for OMRON PLCs and components. <br> CX-One runs on the following OS. <br> Windows 2000 (Service Pack 4 or higher), XP, Vista or 7 <br> Note: Except for 64-bit version <br> CX-One Ver.4. $\square$ includes CX-Programmer Ver.9. $\square$. <br> For details, refer to the CX-One catalog (Cat. No. R134). | 1 license *1 | CD <br> DVD <br> $* 2$ | CXONE-AL01C-V4 CXONE-AL01D-V4 | --- |
| FA Integrated Tool Package <br> CX-One Lite Ver. 4. | The CX-One Lite is a subset of the complete CX-One package that provides only the Support Software required for micro PLC applications. <br> CX-One Lite runs on the following OS. <br> Windows 2000 (Service Pack 4 or higher), XP, Vista or 7 <br> Note: Except for 64-bit version <br> CX-One Ver.4. $\square$ includes Micro PLC Edition <br> CX-Programmer Ver.9. $\square$. . | 1 license | CD | CXONE-LT01C-V4 |  |
|  | CX-Drive can still be ordered individually in the following model numbers. |  |  |  |  |
| CX-Drive Ver.1. $\square$ | Application software to set and control data for Inverters and Servos. <br> OS: Windows 2000 (Service Pack 3a or higher), XP, or Vista | 1 license | CD | WS02-DRVC1 | --- |

*1. Multi licenses are available for the CX-One (3, 10, 30, or 50 licenses).
*2. When purchasing the DVD format, verify the computer model and DVD drive specifications before purchasing.

## Standard Specification List

3-phase 200 V Class

| Function name |  |  | 3-phase 200 V |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model name (3G3MX2-) |  |  | A2001 | A2002 | A2004 | A2007 | A2015 | A2022 | A2037 | A2055 | A2075 | A2110 | A2150 |
| Applicable motor capacity | kW | CT | 0.1 | 0.2 | 0.4 | 0.75 | 1.5 | 2.2 | 3.7 | 5.5 | 7.5 | 11 | 15 |
|  |  | VT | 0.2 | 0.4 | 0.75 | 1.1 | 2.2 | 3.0 | 5.5 | 7.5 | 11 | 15 | 18.5 |
|  | HP | CT | 1/8 | 1/4 | 1/2 | 1 | 2 | 3 | 5 | $71 / 2$ | 10 | 15 | 20 |
|  |  | VT | 1/4 | 1/2 | 1 | $11 / 2$ | 3 | 4 | $71 / 2$ | 10 | 15 | 20 | 25 |
| Rated output capacity [kVA] | 200 V | CT | 0.2 | 0.5 | 1.0 | 1.7 | 2.7 | 3.8 | 6.0 | 8.6 | 11.4 | 16.2 | 20.7 |
|  |  | VT | 0.4 | 0.6 | 1.2 | 2.0 | 3.3 | 4.1 | 6.7 | 10.3 | 13.8 | 19.3 | 23.9 |
|  | 240 V | CT | 0.3 | 0.6 | 1.2 | 2.0 | 3.3 | 4.5 | 7.2 | 10.3 | 13.7 | 19.5 | 24.9 |
|  |  | VT | 0.4 | 0.7 | 1.4 | 2.4 | 3.9 | 4.9 | 8.1 | 12.4 | 16.6 | 23.2 | 28.6 |
| Rated input voltage |  |  | 3-phase $200 \mathrm{~V}-15 \%$ to $240 \mathrm{~V}+10 \%, 50 / 60 \pm 5 \%$ |  |  |  |  |  |  |  |  |  |  |
| Rated output voltage |  |  | 3-phase 200 to 240 V (The output cannot exceed the incoming voltage). |  |  |  |  |  |  |  |  |  |  |
| Rated output current [A] |  | CT | 1.0 | 1.6 | 3.0 | 5.0 | 8.0 | 11.0 | 17.5 | 25.0 | 33.0 | 47.0 | 60.0 |
|  |  | VT | 1.2 | 1.9 | 3.5 | 6.0 | 9.6 | 12.0 | 19.6 | 30.0 | 40.0 | 56.0 | 69.0 |
| Short-time deceleration braking torque (\%) (Discharge Resistor not connected) |  |  | 50 | 50 | 50 | 50 | 50 | 20 | 20 | 20 | 20 | 10 | 10 |
| Braking Resistor circuit * | Regenerative braking |  | Built-in Braking Resistor circuit (separate Discharge Resistor) |  |  |  |  |  |  |  |  |  |  |
|  | Min. co resista | ctable $\text { [ } \Omega]$ | 100 | 100 | 100 | 50 | 50 | 35 | 35 | 20 | 17 | 17 | 10 |
| Weight [kg] |  |  | 1.0 | 1.0 | 1.1 | 1.2 | 1.6 | 1.8 | 2.0 | 3.3 | 3.4 | 5.1 | 7.4 |
| Dimensions (width $\times$ height) [mm] |  |  | $68 \times 128$ |  |  |  | $108 \times 128$ |  | $\begin{aligned} & 140 \times \\ & 128 \\ & \hline \end{aligned}$ | $140 \times 260$ |  | $\begin{aligned} & 180 \times \\ & 296 \end{aligned}$ | $\begin{aligned} & 220 \times \\ & 350 \end{aligned}$ |
| Dimensions (depth) [mm] |  |  | 109 |  | 122.5 | 145.5 | $170.5$ |  | 170.5 | 155 |  | 175 |  |

* The BRD usage is $10 \%$.

3-phase 400 V Class

| Function name |  |  | 3-phase 400 V |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model name (3G3MX2-) |  |  | A4004 | A4007 | A4015 | A4022 | A4030 | A4040 | A4055 | A4075 | A4110 | A4150 |
| Applicable motor capacity | kW | CT | 0.4 | 0.75 | 1.5 | 2.2 | 3.0 | 4.0 | 5.5 | 7.5 | 11 | 15 |
|  |  | VT | 0.75 | 1.5 | 2.2 | 3.0 | 4.0 | 5.5 | 7.5 | 11 | 15 | 18.5 |
|  | HP | CT | 1/2 | 1 | 2 | 3 | 4 | 5 | $71 / 2$ | 10 | 15 | 20 |
|  |  | VT | 1 | 2 | 3 | 4 | 5 | $71 / 2$ | 10 | 15 | 20 | 25 |
| Rated output capacity [kVA] | 380 V | CT | 1.1 | 2.2 | 3.1 | 3.6 | 4.7 | 6.0 | 9.7 | 11.8 | 15.7 | 20.4 |
|  |  | VT | 1.3 | 2.6 | 3.5 | 4.5 | 5.7 | 7.3 | 11.5 | 15.1 | 20.4 | 25.0 |
|  | 480 V | CT | 1.4 | 2.8 | 3.9 | 4.5 | 5.9 | 7.6 | 12.3 | 14.9 | 19.9 | 25.7 |
|  |  | VT | 1.7 | 3.4 | 4.4 | 5.7 | 7.3 | 9.2 | 14.5 | 19.1 | 25.7 | 31.5 |
| Rated input voltage |  |  | 3-phase $380 \mathrm{~V}-15 \%$ to $480 \mathrm{~V}+10 \%, 50 / 60 \pm 5 \%$ |  |  |  |  |  |  |  |  |  |
| Rated output voltage |  |  | 3-phase 380 to 480 V (The output cannot exceed the incoming voltage). |  |  |  |  |  |  |  |  |  |
| Rated output current [A] |  | CT | 1.8 | 3.4 | 4.8 | 5.5 | 7.2 | 9.2 | 14.8 | 18.0 | 24.0 | 31.0 |
|  |  | VT | 2.1 | 4.1 | 5.4 | 6.9 | 8.8 | 11.1 | 17.5 | 23.0 | 31.0 | 38.0 |
| Short-time deceleration braking torque (\%) (Discharge Resistor not connected) |  |  | 50 | 50 | 50 | 20 | 20 | 20 | 20 | 20 | 10 | 10 |
| Braking Resistor circuit * | Regenerative braking |  | Built-in Braking Resistor circuit (separate Discharge Resistor) |  |  |  |  |  |  |  |  |  |
|  | Min. connectable resistance [ $\Omega$ ] |  | 180 | 180 | 180 | 100 | 100 | 100 | 70 | 70 | 70 | 35 |
| Weight [kg] |  |  | 1.5 | 1.6 | 1.8 | 1.9 | 1.9 | 2.1 | 3.5 | 3.5 | 4.7 | 5.2 |
| Dimensions (width $\times$ height) [mm] |  |  | $108 \times 128$ |  |  |  |  | $\begin{aligned} & 140 \times \\ & 128 \\ & \hline \end{aligned}$ | $140 \times 260$ |  | $180 \times 296$ |  |
| Dimensions (depth) [mm] |  |  | 143.5 | 170.5 |  |  |  | 170.5 | 155 |  | 175 |  |

* The BRD usage is $10 \%$.

1-phase 200 V Class

| Function name |  |  | 1-phase 200 V |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model name (3G3MX2-) |  |  | AB001 | AB002 | AB004 | AB007 | AB015 | AB022 |
| Applicable motor capacity | kW | CT | 0.1 | 0.2 | 0.4 | 0.75 | 1.5 | 2.2 |
|  |  | VT | 0.2 | 0.4 | 0.55 | 1.1 | 2.2 | 3.0 |
|  | HP | CT | 1/8 | 1/4 | 1/2 | 1 | 2 | 3 |
|  |  | VT | 1/4 | 1/2 | 3/4 | $11 / 2$ | 3 | 4 |
| Rated output capacity [kVA] | 200 V | CT | 0.2 | 0.5 | 1.0 | 1.7 | 2.7 | 3.8 |
|  |  | VT | 0.4 | 0.6 | 1.2 | 2.0 | 3.3 | 4.1 |
|  | 240 V | CT | 0.3 | 0.6 | 1.2 | 2.0 | 3.3 | 4.5 |
|  |  | VT | 0.4 | 0.7 | 1.4 | 2.4 | 3.9 | 4.9 |
| Rated input voltage |  |  | 1-phase $200 \mathrm{~V}-15 \%$ to $240 \mathrm{~V}+10 \%, 50 / 60 \mathrm{~Hz} \pm 5 \%$ |  |  |  |  |  |
| Rated output voltage |  |  | 3-phase 200 to 240 V (The output cannot exceed the incoming voltage). |  |  |  |  |  |
| Rated output current [A] |  | CT | 1.0 | 1.6 | 3.0 | 5.0 | 8.0 | 11.0 |
|  |  | VT | 1.2 | 1.9 | 3.5 | 6.0 | 9.6 | 12.0 |
| Short-time deceleration braking torque (\%) (Discharge Resistor not connected) |  |  | 50 | 50 | 50 | 50 | 50 | 20 |
| Braking Resistor circuit * | Regenerative braking |  | Built-in Braking Resistor circuit (separate Discharge Resistor) |  |  |  |  |  |
|  | Min. C resist | ctable $[\Omega]$ | 100 | 100 | 100 | 50 | 50 | 35 |
| Weight [kg] |  |  | 1.0 | 1.0 | 1.1 | 1.6 | 1.8 | 1.8 |
| Dimensions (width $\times$ height) [mm] |  |  | $68 \times 128$ |  |  | $108 \times 128$ |  |  |
| Dimensions (depth) [mm] |  |  | 109 |  | 122.5 | 170.5 |  |  |

* The BRD usage is $10 \%$.


## Common Specifications

| Function name |  | Specifications |
| :---: | :---: | :---: |
| Enclosure ratings $* 1$ |  | Open type (IP20) |
| $\begin{aligned} & \bar{O} \\ & \text { D } \\ & 0 \\ & 0 \end{aligned}$ | Control method | Phase-to-phase sinusoidal modulation PWM |
|  | Output frequency range $* 2$ | 0.10 to 400 Hz (or 1,000 Hz in the high-frequency mode; restrictions apply) |
|  | Frequency precision $* 3$ | Digital command: $\pm 0.01 \%$ of the max. frequency, Analog command: $\pm 0.2 \%$ of the max. frequency $\left(25^{\circ} \mathrm{C} \pm 10^{\circ} \mathrm{C}\right)$ |
|  | Frequency setting resolution | Digital setting: 0.01 Hz , Analog setting: One-thousandth of the maximum frequency |
|  | Voltage/Frequency characteristics | V/f characteristics (constant/reduced torque) Sensorless vector control, V/f control with speed feedback |
|  | Overload current rating | Heavy load rating (CT): 150\%/60 s Light load rating (VT): 120\%/60 s |
|  | Instantaneous overcurrent protection | 200\% of the value of heavy load rating (CT) |
|  | Acceleration/Deceleration time | 0.01 to 3600 s (linear/curve selection), acceleration/deceleration 2 setting available |
|  | Carrier frequency adjustment range | 2 to 15 kHz (with derating) |
|  | Starting torque | 200\%/0.5 Hz (sensorless vector control) |
|  | External DC injection braking | Starts at a frequency lower than that in deceleration via the STOP command, at a value set lower than that during operation, or via an external input. (Level and time settable). |
| Protective functions |  | Overcurrent, overvoltage, undervoltage, electronic thermal, temperature error, ground fault overcurrent at power-on status, rush current prevention circuit, overload limit, incoming overvoltage, external trip, memory error, CPU error, USP error, communication error, overvoltage suppression during deceleration, protection upon momentary power outage, emergency cutoff, etc. |
|  | Frequency settings | Digital Operator <br> External analog input signal: Variable resistance/ 0 to $10 \mathrm{VDC} / 4$ to 20 mA , Modbus communication <br> (Modbus-RTU) |
|  | RUN/STOP command | Digital Operator <br> External digital input signal (3-wire input supported), Modbus communication (Modbus-RTU) |
|  | Multi-function input | 7 points (Selectable from 59 functions) |
|  | Analog input | 2 points (Voltage FV terminal: 10 bits/0 to 10 V , Current FI terminal: 10 bits/4 to 20 mA ) |
|  | Pulse input | 1 point (RP terminal: 32 kHz max., 5 to 24 VDC ) |
|  | Multi-function output | 2 points (P1/EDM, P2; selectable from 43 functions) |
|  | Relay output | 1 point (1c contact: MC, MA, MB; selectable from 43 functions) |
|  | Analog output (Frequency monitor) | 1 point (AM terminal: Voltage 10 bits/0 to 10 V ) (Frequency, current selectable) |
|  | Pulse output | 1 point (MP terminal: 32 kHz max., 0 to 10 V ) |
| 00000000000 | RS-422 | RJ45 connector (for Digital Operator) |
|  | RS-485 | Control circuit terminal block, Modbus communication (Modbus-RTU) |
|  | USB | USB1.1, mini-B connector |
| Other functions |  | AVR function, V/f characteristics switching, upper/lower limit, 16-step speeds, starting frequency adjustment, jogging operation, carrier frequency adjustment, PID control, frequency jump, analog gain/ bias adjustment, S shape acceleration/deceleration, electronic thermal characteristics, level adjustment, restart function, torque boost function, fault monitor, soft lock function, frequency conversion display, USP function, motor 2 control function, UP/DWN, overcurrent suppression function, etc. |
|  | Ambient temperature | -10 to $50^{\circ} \mathrm{C}$ (However, derating is required). |
|  | Ambient storage temperature | $-20^{\circ} \mathrm{C}$ to $65^{\circ} \mathrm{C}$ (short-time temperature during transport) |
|  | Humidity | 20\% to $90 \% \mathrm{RH}$ (with no condensation) |
|  | Vibration | $5.9 \mathrm{~m} / \mathrm{s}^{2}$ (0.6G), 10 to 55 Hz |
|  | Location | At a maximum altitude of 1,000 m; indoors (without corrosive gases or dust) |
| Options |  | DC reactor, AC reactor, radio noise filter, input noise filter, output noise filter, regenerative braking unit, Braking Resistor, EMC noise filter, etc. |

Note: 1. The applicable motor is a 3-phase standard motor. For using any other type, be sure that the rated current does not exceed that of the Inverter.
2. Output voltage decreases according to the level of the power supply voltage.
3. The braking torque at the time of capacitor feedback is an average deceleration torque at the shortest deceleration (when it stops from 50 Hz ). It is not a continuous regeneration torque. Also, the average deceleration torque varies depending on the motor loss. The value is reduced in operation over 50 Hz .
*1. Protection method complies with JEM 1030
*2. To operate the motor at over $50 / 60 \mathrm{~Hz}$, contact the motor manufacturer to find out the maximum allowable speed of revolution.
*3. For the stable control of the motor, the output frequency may exceed the maximum frequency set in A004 (A204) by 2 Hz max.

## Terminal Block Specifications

## Names of Parts Inside the Terminal Block Cover



| Name | Description |
| :--- | :--- |
| Modbus-RTU Termination resistor <br> selector switch | Use this Terminal Resistor selector switch for RS-485 terminals on the control circuit terminal block. When this switch is turned <br> ON, the internal $200 \Omega$ Resistor is connected. |
| Safety function selector switch | Turn this switch ON when using the safety function. Turn OFF the power before turning this switch ON/OFF. For details, refer to <br> User's Manual (I570). |
| EDM function selector switch | Turn this switch ON when using the EDM output of the safety function. Turn OFF the power before turning this switch ON/ <br> OFF.For details, refer to User's Manual (I570). |
| USB connector | Use this mini-B USB connector to connect a PC. <br> Even when the Inverter is being operated by a PC, etc., via USB connection, it can still be operated using the Digital Operator. |
| Connector for Digital Operator | Use this connector to connect the Digital Operator. |
| Connector for optional board | Use this connector to mount the optional board. (The optional board will be released soon.) |
| Control circuit terminal blocks A <br> and B | These terminal blocks are used to connect various digital/analog input and output signals for inverter control, etc. |
| Multi-function contact terminal block | Use this SPDT contact terminal block for relay outputs. |
| Main circuit terminal block | Use this terminal block to connect an output to the motor and Braking Resistor, etc. <br> Also, use this terminal block to connect the inverter to the main power supply. |
| CHARGE indicator <br> (Charge indicator LED) | This LED indicator is lit if the DC voltage of the main circuit (between terminals P/+2 and N/-) remains approx. 45 V or above <br> after the power has been cut off. Before wiring, etc. confirm that the Charge LED indicator is turned OFF. |

Main Circuit Terminals Specifications
[Main Circuit Terminal Block]
[Main Circuit Terminal Block]
3G3MX2-A2001 to A2037
3G3MX2-A2001 to A2037
3G3MX2-A4004 to A4040
3G3MX2-AB001 to AB022


From power supply To motors
(Connect to L1 and N for 1-phase)
3G3MX2-A4004 to A4040 3G3MX2-AB001 to AB022


| Terminal <br> symbol | Terminal name | Description |
| :--- | :--- | :--- |
| $\mathrm{R} / \mathrm{L} 1$ | Main power supply input terminal | Connect the input AC power supply. In the case of a 1-phase 200 V power supply, connect to <br> L1 and N. |
| $\mathrm{S} / \mathrm{L} 2$ | Inverter output terminal | Connect a 3-phase motor. |
| $\mathrm{T} / \mathrm{L} 3$ | DC1 reactor connection terminal | Remove the shorting bar between terminals +1 and $\mathrm{P} /+2$, and connect the optional DC reactor. |

## Control Circuit Terminals Specifications



|  |  |  | Terminal symbol | Terminal name | Description | Specifications |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \frac{0}{0} \\ & \frac{0}{\pi} \\ & \frac{10}{4} \end{aligned}$ | Power supply |  | SC | Input signal common | This is a common terminal used by the internal power supply, digital input and analog input/ output terminals. |  |
|  |  |  | FS | Frequency reference power supply | 10 VDC power supply for the FV terminal. | Allowable max. current: 7 mA |
|  | Frequency setting input |  | FV | Frequency reference input terminal (analog voltage input) | Use this terminal if the frequency reference is provided by 0 to 10 VDC voltage input. | Input impedance <br> Approx. $10 \mathrm{k} \Omega$ <br> Allowable input voltage range $-0.3 \text { to }+12 \mathrm{VDC}$ |
|  |  |  | FI | Frequency reference terminal (analog current input) | Use this terminal if the frequency reference is provided by 4 to 20 mA current input. | Input impedance <br> $100 \Omega$ <br> Allowable input range <br> 0 to 24 mA |
|  | Sens inpu |  | S5/TH | External thermistor input (also used as multi-function input terminal) | Connect an external thermistor between the SCs, to trip the Inverter when a temperature error occurs. (The inverter will trip when the input from thermistor is approx. $3 \mathrm{k} \Omega$ or higher.) Since this input is also used as the multi-function input terminal, setting of C005 is required. For details, refer to User's Manual (I570). | PTC type |
|  | Out |  | AM | Multi-function analog output (voltage) | Specified signals can be output using voltage signals of 0 to 10 VDC. | AM |
| ."す | Power supply |  | SC | Input signal common | This is a common terminal used by the internal power supply, digital input and analog input/ output terminals. |  |
|  |  |  | P24 | Power supply terminal for input signal | 24 VDC power supply for contact input signal.This is used as a common terminal if the source logic is input. | Allowable max. current: 100 mA |
|  |  |  | PSC | Power supply terminal for input terminal | Sink logic input: Shorted with P24 <br> Source logic input: Shorted with SC <br> To drive the contact input using an external power supply, remove the shorting bar. For details, refer to User's Manual (I570). |  |
|  |  | む0000 | S7/EB S6 S5/TH S4/GS2 S3/GS1 S2 S1 | Multi-function input terminal | Select 7 functions from among 59, and allocate them to terminals S1 through S7/EB. Both sink and source logics are supported. For details, refer to User's Manual (I570). | Voltage between each input and PSC <br> ON voltage: 18 V min. <br> OFF voltage: 3 V max. <br> Allowable max. voltage: 27 VDC <br> Load current: 5 mA (at 24 V ) |
|  |  |  | $\begin{aligned} & \text { S4/GS2 } \\ & \text { S3/GS1 } \end{aligned}$ | Safety input | Enabled when the safety function selector switch is turned ON. For details, refer to User's Manual (I570). |  |


|  |  |  | Terminal symbol | Terminal name | Description | Specifications |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\bar{\square}$ | $\stackrel{\vdots}{\bar{\partial}}$ | $\frac{\stackrel{0}{3}}{\square}$ | RP | Pulse input-A | A pulse input for frequency setting. (Take note that the internal circuit is different from input terminals S7/EB.) | Input pulse 32 kHz max. <br> Voltage between input and SC <br> ON voltage: 4 V min. <br> OFF voltage: 1 V max. <br> Allowable max. voltage: 27 VDC |
|  |  |  | S7/EB | Pulse input-B | A pulse input for frequency setting. (Take note that the internal circuit is different from input terminal RP.) | Input pulse 1.8 kHz max. <br> ON voltage: 18 V min. OFF voltage: 3 V max. Allowable max. voltage: 27 VDC Load current: 5 mA (at 24 V ) |
|  |  |  | $\begin{array}{\|l} \mathrm{P} 1 / \mathrm{EDM} \\ \mathrm{P} 2 \end{array}$ | Multi-function output terminal | Select 2 functions from among 43, and allocate them to terminals P1 through P2. Both sink and source logics are supported. For details, refer to User's Manual (1570). | Open collector output <br> Between each terminal and PC <br> Allowable max. voltage: 27 V <br> Allowable max. current: 50 mA <br> Voltage drop when ON: 4 V max. |
|  |  |  | P1/EDM | Safety monitor | Enabled when the EDM function selector switch is ON. For details, refer to "Safety Function" on page 5-167. |  |
|  |  |  | $\begin{array}{\|l\|} \hline \text { MA } \\ \text { MB } \end{array}$ | Relay output terminal | Select the desired functions from among 43 functions, and allocate them to these terminals. SPDT contact. <br> The factory default of Relay Output (MA, MB) Contact Selection (CO36) is NC contact between MA-MC, and NO contact between MB-MC. | Max. contact capacity MA-MC: <br> 250 VAC, 2 A (resistance) <br> 0.2 A (induction) MB-MC: <br> 250 VAC, 1 A (resistance) <br> 0.2 A (induction) <br> Contact min. capacity <br> 100 VAC, 10 mA <br> $5 \mathrm{VDC}, 100 \mathrm{~mA}$ |
|  |  |  | MC | Relay output common |  |  |
|  |  | $\stackrel{\text { ¢ }}{\stackrel{\text { N }}{\sim}}$ | MP | Pulse output | Pulses are output. | Output pulse: 32 kHz max. <br> Output voltage: 10 VDC <br> Allowable max. current: 2 mA |
| Serial communication |  |  | $\begin{array}{\|l\|} \text { RS+ } \\ \text { RS- } \end{array}$ | Modbus port (RS-485) | RS-485 port <br> RS+ RS-485 differential (+) signal RS- RS-485 differential (-) signal | Max. speed: 115.2 kbps Built-in Terminal Resistor: $200 \Omega$ Slide switch selection |

## Switching Method for Input Control Logics

Multi-function input terminals are set to sink logic at the factory.
To switch the input control logic to source logic, remove the shorting bar between terminals P24 and PSC on the control circuit terminal block, and connect it between terminals PSC and SC.
(1) Sink logic

(2) Source logic


## Connection Diagram



Note: 1. Connect a single-phase 200 V AC input to terminals L1 and N.
2. Factory default settings for relay output are NC contact for MA and NO contact for MB.

## Names of Parts and their Descriptions



|  | Name | Description |
| :--- | :--- | :--- |
|  | POWER LED | Lit (green) while the Inverter is receiving power. |
| For information on how to reset the trip, refer to User's Manual (I570). |  |  |

3G3MX2-AB001 3G3MX2-AB002 3G3MX2-AB004 3G3MX2-A2001 3G3MX2-A2002 3G3MX2-A2004
3G3MX2-A2007


| Power supply | Model | W [mm] | H [mm] | D [mm] | D1 [mm] |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1-phase <br> 200 V | $\begin{aligned} & \text { 3G3MX2-AB001 } \\ & \text { 3G3MX2-AB002 } \end{aligned}$ | 68 | 128 | 109 | 13.5 |
|  | 3G3MX2-AB004 |  |  | 122.5 | 27 |
| 3-phase <br> 200 V | $\begin{aligned} & \text { 3G3MX2-A2001 } \\ & \text { 3G3MX2-A2002 } \end{aligned}$ |  |  | 109 | 13.5 |
|  | 3G3MX2-A2004 |  |  | 122.5 | 27 |
|  | 3G3MX2-A2007 |  |  | 145.5 | 50 |

3G3MX2-AB007 3G3MX2-AB015 3G3MX2-AB022 3G3MX2-A2015 3G3MX2-A2022 3G3MX2-A4004 3G3MX2-A4007 3G3MX2-A4015 3G3MX2-A4022 3G3MX2-A4030


| Power supply | Model | W [mm] | H [mm] | D [mm] | D1 [mm] |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1-phase 200 V | $\begin{aligned} & \text { 3G3MX2-AB007 } \\ & \text { 3G3MX2-AB015 } \\ & \text { 3G3MX2-AB022 } \end{aligned}$ | 108 | 128 | 170.5 | 55 |
| $\begin{aligned} & \text { 3-phase } \\ & 200 \mathrm{~V} \end{aligned}$ | $\begin{aligned} & \text { 3G3MX2-A2015 } \\ & \text { 3G3MX2-A2022 } \end{aligned}$ |  |  |  |  |
|  | 3G3MX2-A4004 |  |  | 143.5 | 28 |
| 3-phase 400 V | $\begin{aligned} & \text { 3G3MX2-A4007 } \\ & \text { 3G3MX2-A4015 } \\ & \text { 3G3MX2-A4022 } \\ & \text { 3G3MX2-A4030 } \end{aligned}$ |  |  | 170.5 | 55 |

3G3MX2-A2037 3G3MX2-A4040


| Power supply | Model | W [mm] | H [mm] | D [mm] | D1 [mm] |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 3-phase <br> 200 V | $3 G 3 M \times 2-A 2037$ |  |  |  |  |
| 3-phase <br> 400 V | $3 G 3 M \times 2-\mathrm{A} 4040$ | 140 | 128 | 170.5 | 55 |

3G3MX2-A2055 3G3MX2-A2075 3G3MX2-A4055 3G3MX2-A4075


| Power supply | Model | W [mm] | H [mm] | D [mm] | D1 [mm] |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 3-phase 200 V | $\begin{aligned} & \text { 3G3MX2-A2055 } \\ & \text { 3G3MX2-A2075 } \end{aligned}$ | 140 | 260 | 155 | 73.3 |
| 3-phase 400 V | $\begin{aligned} & \text { 3G3MX2-A4055 } \\ & \text { 3G3MX2-A4075 } \end{aligned}$ |  |  |  |  |

3G3MX2-A2110
3G3MX2-A4110 3G3MX2-A4150


| Power supply | Model | W [mm] | H [mm] | D [mm] | D1 [mm] |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 3-phase <br> 200 V | 3G3MX2-A2110 |  |  |  |  |
| 3-phase <br> 400 V | 3G3MX2-A4110 <br> 3G3MX2-A4150 | 180 | 296 | 175 | 97 |

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3G3MX2-A2150

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| Power supply | Model | W [mm] | $H[\mathrm{~mm}]$ | $\mathrm{D}[\mathrm{mm}]$ | $\mathrm{D} 1[\mathrm{~mm}]$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 3-phase <br> 200 V | $3 G 3 M X 2-\mathrm{A} 2150$ | 220 | 350 | 175 | 84 |

## 3G3MX2 Related Options

| Type | Specifications |  |  |  |  |  |  |  | Model |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% ED | Voltage | Max. Motor kW | Inverter 3G3MX2-A |  | Connectable min. resistance $\Omega$ | Resist $\Omega$ | Braking torque \% |  |
|  |  |  |  | 3-Phase | 1-Phase |  |  |  |  |
|  | $\begin{gathered} 3 \% \\ 10 \mathrm{sec} \\ \max . \end{gathered}$ |  | 0.12 | 2001 | B001 | 100 | 400 | 200 | AX-REM00K1400-IE |
|  |  |  | 0.25 | 2002 | B002 |  |  | 180 |  |
|  |  |  | 0.55 | 2004 | B004 |  | 200 | 180 | AX-REM00K1200-IE |
|  |  |  | 1.1 | 2007 | B007 | 50 |  | 100 |  |
|  |  |  | 1.5 | 2015 | B015 |  | 70 | 140 | AX-REM00K2070-IE |
|  |  |  | 2.2 | 2022 | B022 | 35 |  | 90 |  |
|  |  |  | 4.0 | 2037 | - |  | 75 | 50 | AX-REM00K4075-IE |
|  |  |  | 5.5 | 2055 | - | 20 | 35 | 75 | AX-REM00K4035-IE |
|  |  |  | 7.5 | 2075 | - | 17 |  | 55 |  |
|  |  |  | 11 | 2110 | - |  | 35 | 40 | AX-REM00K6035-IE |
|  |  |  | 15 | 2150 | - | 10 | 17 | 55 | AX-REM00K9017-IE |
|  |  | 400 V (Threephase) | 0.55 | 4004 | - | 180 | 400 | 200 | AX-REM00K1400-IE |
|  |  |  | 1.1 | 4007 | - |  |  | 200 |  |
|  |  |  | 1.5 | 4015 | - |  | 200 | 190 | AX-REM00K1200-IE |
|  |  |  | 2.2 | 4022 | - | 100 | 200 | 130 | AX-REM00K2200-IE |
|  |  |  | 3.0 | 4030 | - |  | 120 | 160 | AX-REM00K2120-IE |
|  |  |  | 4.0 | 4040 | - |  |  | 120 |  |
|  |  |  | 5.5 | 4055 | - | 70 | 75 | 140 | AX-REM00K4075-IE |
|  |  |  | 7.5 | 4075 | - |  |  | 100 |  |
|  |  |  | 11 | 4110 | - |  | 100 | 50 | AX-REM00K6100-IE |
|  |  |  | 15 | 4150 | - | 30 | 70 | 55 | AX-REM00K9070-IE |
|  | $\begin{gathered} 10 \% \\ 10 \text { sec } \\ \text { max. } \end{gathered}$ | 200V <br> (Single-/ <br> Threephase) | 0.12 | 2001 | B001 | 100 | 400 | 200 | AX-REM00K1400-IE |
|  |  |  | 0.25 | 2002 | B002 |  |  | 180 |  |
|  |  |  | 0.55 | 2004 | B004 |  | 200 | 180 | AX-REM00K1200-IE |
|  |  |  | 1.1 | 2007 | B007 | 50 | 70 | 200 | AX-REM00K2070-IE |
|  |  |  | 1.5 | 2015 | B015 |  | 75 | 130 | AX-REM00K4075-IE |
|  |  |  | 2.2 | 2022 | B022 | 35 | 35 | 180 | AX-REM00K4035-IE |
|  |  |  | 4.0 | 2037 | - |  | 35 | 100 | AX-REM00K6035-IE |
|  |  |  | 5.5 | 2055 | - | 20 | 20 | 150 | AX-REM00K9020-IE |
|  |  |  | 7.5 | 2075 | - | 17 | 17 | 110 | AX-REM01K9017-IE |
|  |  |  | 11 | 2110 | - |  | 17 | 75 | AX-REM02K1017-IE |
|  |  |  | 15 | 2150 | - | 10 | 10 | 95 | AX-REM03K5010-IE |
|  |  | 400 V (Threephase) | 0.55 | 4004 | - | 180 | 400 | 200 | AX-REM00K1400-IE |
|  |  |  | 1.1 | 4007 | - |  |  | 200 |  |
|  |  |  | 1.5 | 4015 | - |  | 200 | 190 | AX-REM00K2200-IE |
|  |  |  | 2.2 | 4022 | - | 100 | 120 | 200 | AX-REM00K5120-IE |
|  |  |  | 3.0 | 4030 | - |  |  | 160 |  |
|  |  |  | 4.0 | 4040 | - |  | 100 | 140 | AX-REM00K6100-IE |
|  |  |  | 5.5 | 4055 | - | 70 | 70 | 150 | AX-REM00K9070-IE |
|  |  |  | 7.5 | 4075 | - |  | 70 | 110 | AX-REM01K9070-IE |
|  |  |  | 11 | 4110 | - |  | 70 | 75 | AX-REM02K1070-IE |
|  |  |  | 15 | 4150 | - | 30 | 35 | 110 | AX-REM03K5035-IE |


| Type | Specifications |  |  |  | Model |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Type | Voltage | $\begin{gathered} \text { Inverter } \\ \text { 3G3MX2-A } \end{gathered}$ | Rated Current (A) |  |
|  | Foot Mounting [Rasmi] | 200 V(Single-phase) | B001 / B002 / B004 | 10 | AX-FIM1010-RE |
|  |  |  | B007 | 14 | AX-FIM1014-RE |
|  |  |  | B015 / B022 | 24 | AX-FIM1024-RE |
|  |  | $\begin{gathered} 200 \mathrm{~V} \\ \text { (Three-phase) } \end{gathered}$ | 2001 / 2002 / 2004 / 2007 | 10 | AX-FIM2010-RE |
|  |  |  | 2015 / 2022 | 20 | AX-FIM2020-RE |
|  |  |  | 2037 | 30 | AX-FIM2030-RE |
|  |  |  | 2055 / 2075 | 60 | AX-FIM2060-RE |
|  |  |  | 2110 | 80 | AX-FIM2080-RE |
|  |  |  | 2150 | 100 | AX-FIM2100-RE |
|  |  | 400V <br> (Three-phase) | 4004 / 4007 | 5 | AX-FIM3005-RE |
|  |  |  | 4015 / 4022 / 4030 | 10 | AX-FIM3010-RE |
|  |  |  | 4040 | 14 | AX-FIM3014-RE |
|  |  |  | 4055 / 4075 | 23 | AX-FIM3030-RE |
|  |  |  | 4110 / 4150 | 50 | AX-FIM3050-RE |
|  | Separate Mounting [Schaffner] | 200V <br> (Single-phase) | B001 / B002 / B004 | 10 | AX-FIM1010-SE |
|  |  |  | B007 / B015 / B022 | 24 | AX-FIM1024-SE |
|  |  | 200 V(Three-phase) | 2001 / 2002 / 2004 / 2007 | 10 | AX-FIM2010-SE |
|  |  |  | 2015 / 2022 | 20 | AX-FIM2020-SE |
|  |  |  | 2037 | 30 | AX-FIM2030-SE |
|  |  |  | 2055 / 2075 | 60 | AX-FIM2060-SE |
|  |  |  | 2110 | 80 | AX-FIM2080-SE |
|  |  |  | 2150 | 100 | AX-FIM2100-SE |
|  |  | 400 V(Three-phase) | 4004 / 4007 | 5 | AX-FIM3005-SE |
|  |  |  | 4015 / 4022 / 4030 | 10 | AX-FIM3010-SE |
|  |  |  | 4040 | 14 | AX-FIM3014-SE |
|  |  |  | 4055 / 4075 | 23 | AX-FIM3030-SE |
|  |  |  | 4110 / 4150 | 50 | AX-FIM3050-SE |


| Type | Specifications |  | Model |
| :---: | :---: | :---: | :---: |
|  | Voltage | Inverter 3G3MX2-A |  |
| INPUT AC REACTORS | $\begin{gathered} 200 \mathrm{~V} \\ \text { (Single-phase) } \end{gathered}$ | B001 / B002 / B004 / B007 / B015 / B022 | UNDER DEVELOPMENT |
|  | 200 V(Three-phase) | 2001 / 2002 / 2004 / 2007 | AX-RAI02800080-DE |
|  |  | 2015 / 2022 / 2037 | AX-RAI00880200-DE |
|  |  | 2055 / 2075 | AX-RAI00350335-DE |
|  |  | 2110 / 2015 | AX-RAI00180670-DE |
|  | $\begin{gathered} 400 \mathrm{~V} \\ \text { (Three-phase) } \end{gathered}$ | 4004 / 4007 / 4015 | AX-RAI07700050-DE |
|  |  | 4022 / 4030 / 4040 | AX-RAI03500100-DE |
|  |  | 4055 / 4075 | AX-RAI01300170-DE |
|  |  | 4110 / 4150 | AX-RAI00740335-DE |


| Type | Specifications |  | Model |
| :---: | :---: | :---: | :---: |
|  | Voltage | Inverter 3G3MX2-A |  |
|  | 200 V <br> (Single-phase) | B001 / B002 | AX-RC10700032-DE |
|  |  | B004 | AX-RC06750061-DE |
|  |  | B007 | AX-RC03510093-DE |
|  |  | B015 | AX-RC02510138-DE |
|  |  | B022 | AX-RC01600223-DE |
|  | 200 V(Three-phase) | 2001 / 2002 | AX-RC21400016-DE |
|  |  | 2004 | AX-RC10700032-DE |
|  |  | 2007 | AX-RC06750061-DE |
|  |  | 2015 | AX-RC03510093-DE |
|  |  | 2022 | AX-RC02510138-DE |
|  |  | 2037 | AX-RC01600223-DE |
|  |  | 2055 | AX-RC01110309-DE |
|  |  | 2075 | AX-RC00840437-DE |
|  |  | 2110 | AX-RC00590614-DE |
|  |  | 2150 | AX-RC00440859-DE |
|  | 400V <br> (Three-phase) | 4004 | AX-RC43000020-DE |
|  |  | 4007 | AX-RC27000030-DE |
|  |  | 4015 | AX-RC14000047-DE |
|  |  | 4022 | AX-RC10100069-DE |
|  |  | 4030 | AX-RC08250093-DE* |
|  |  | 4040 | AX-RC06400116-DE |
|  |  | 4055 | AX-RC04410167-DE |
|  |  | 4075 | AX-RC03350219-DE |
|  |  | 4110 | AX-RC02330307-DE |
|  |  | 4150 | AX-RC01750430-DE |
|  | $\begin{gathered} \text { 200V } \\ \text { (Single-phase) } \end{gathered}$ | B001 / B002 / B004 | AX-RAO11500026-DE |
|  |  | B007 | AX-RA007600042-DE |
|  |  | B015 | AX-RAO04100075-DE |
|  |  | B022 | AX-RAO03000105-DE |
|  | 200 V(Three-phase) | 2001 / 2002 / 2004 | AX-RAO11500026-DE |
|  |  | 2007 | AX-RAO07600042-DE |
|  |  | 2015 | AX-RAO04100075-DE |
|  |  | 2022 | AX-RAO03000105-DE |
|  |  | 2037 | AX-RAO01830160-DE |
|  |  | 2055 | AX-RAO01150220-DE |
|  |  | 2075 | AX-RAO00950320-DE |
|  |  | 2110 | AX-RAO00630430-DE |
|  |  | 2150 | AX-RAO00490640-DE |
|  | 400 V(Three-phase) | 4004 / 4007 / 4015 | AX-RAO16300038-DE |
|  |  | 4022 | AX-RAO11800053-DE |
|  |  | 4030 / 4040 | AX-RA007300080-DE |
|  |  | 4055 | AX-RAO04600110-DE |
|  |  | 4075 | AX-RAO03600160-DE |
|  |  | 4110 | AX-RAO02500220-DE |
|  |  | 4150 | AX-RAO02000320-DE |

*Under Development

| Type | Specifications |  | Model |
| :---: | :---: | :---: | :---: |
|  | Description | Diameter |  |
|  | For 2.2 kW motors or below | 21 | AX-FER2102-RE |
|  | For 15 kW motors or below | 25 | AX-FER2515-RE |
|  | For 45 kW motors or below | 55 | AX-FER5045-RE |


| Type | Description | Model |
| :---: | :---: | :---: |
|  | Profibus option card | 3G3AX-MX2-PRT-E |
|  | DeviceNet option card | 3G3AX-MX2-DRT-E |
|  | EtherCat option card | 3G3AX-MX2-ECT |
|  | CompoNet option card | 3G3AX-MX2-CRT-E |
|  | Mechatrolink II option card | 3G3AX-MX2-ML2* |
|  | CanOpen option card | 3G3AX-MX2-CORT* |
| U | PC Communication cable <br> ( 2 m, PC USB to Mini USB Connecting Cable with Ferrite) | AX-CUSBM002-E |
|  | LCD Remote operator (5 Line LCD remote operator with copy function, cable length max. 3m.) | AX-OP05-E |
|  | LED Remote operator with frequency reference volume | 3G3AX-OP01 |
|  | 3 meters cable for connecting remote operator | 3G3AX-CAJOP300-EE |
|  | Mounting Kit for LED Operator | 4X-KITMINI |

* Available soon. Please contact OMRON for availability.


## Related Manuals

| Manual No. | Model | Category |
| :--- | :--- | :--- |
| I570 | 3G3MX2 | USERS MANUAL |
| W453 | CXONE-ALL $\square \square$ C/D-V $\square$ <br> WS02-DRVC01 | OPERATION MANUAL |

## Read and Understand this Catalog

Please read and understand this catalog before purchasing the product. Please consult your OMRON representative if you have any questions or comments.

## Warranty and Limitations of Liability

## WARRANTY

OMRON's exclusive warranty is that the products are free from defects in materials and workmanship for a period of one year (or other period if specified) from date of sale by OMRON.
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In no event shall the responsibility of OMRON for any act exceed the individual price of the product on which liability is asserted.
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## Application Considerations

## SUITABILITY FOR USE

OMRON shall not be responsible for conformity with any standards, codes, or regulations that apply to the combination of products in the customer's application or use of the products.

Take all necessary steps to determine the suitability of the product for the systems, machines, and equipment with which it will be used.

Know and observe all prohibitions of use applicable to this product.
NEVER USE THE PRODUCTS FOR AN APPLICATION INVOLVING SERIOUS RISK TO LIFE OR PROPERTY WITHOUT ENSURING THAT THE SYSTEM AS A WHOLE HAS BEEN DESIGNED TO ADDRESS THE RISKS, AND THAT THE OMRON PRODUCTS ARE PROPERLY RATED AND INSTALLED FOR THE INTENDED USE WITHIN THE OVERALL EQUIPMENT OR SYSTEM.

## PROGRAMMABLE PRODUCTS

OMRON shall not be responsible for the user's programming of a programmable product, or any consequence thereof.

## Disclaimers

## CHANGE IN SPECIFICATIONS

Product specifications and accessories may be changed at any time based on improvements and other reasons. It is our practice to change model numbers when published ratings or features are changed, or when significant construction changes are made. However, some specifications of the products may be changed without any notice. When in doubt, special model numbers may be assigned to fix or establish key specifications for your application on your request. Please consult with your OMRON representative at any time to confirm actual specifications of purchased products.

## DIMENSIONS AND WEIGHTS

Dimensions and weights are nominal and are not to be used for manufacturing purposes, even when tolerances are shown.

## PERFORMANCE DATA

Performance data given in this catalog is provided as a guide for the user in determining suitability and does not constitute a warranty. It may represent the result of OMRON's test conditions, and the users must correlate it to actual application requirements. Actual performance is subject to the OMRON Warranty and Limitations of Liability.

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