

Product Category

Motion / Drives

Inverters

3G3MX2-V1

**3G3RX-V1**

SX(400V)

High-function General-purpose Inverters

# 3G3RX-V1

Versatile for a Wide Range of Applications



Related Contents

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RoHS Compliant Status

Features

**Lineup**

Specifications

Dimensions

Catalog / Manual / CAD / Software

last update: December 6, 2018

RX series V1 type Inverter Models

| Rated voltage   | Enclosure ratings | Max. applicable motor capacity |                | Model          |
|-----------------|-------------------|--------------------------------|----------------|----------------|
|                 |                   | CT: Heavy load                 | VT: Light load |                |
| 3-phase 200 VAC | IP20              | 0.4 kW                         | 0.75 kW        | 3G3RX-A2004-V1 |
|                 |                   | 0.75 kW                        | 1.5 kW         | 3G3RX-A2007-V1 |
|                 |                   | 1.5 kW                         | 2.2 kW         | 3G3RX-A2015-V1 |
|                 |                   | 2.2 kW                         | 3.7 kW         | 3G3RX-A2022-V1 |
|                 |                   | 3.7 kW                         | 5.5 kW         | 3G3RX-A2037-V1 |
|                 |                   | 5.5 kW                         | 7.5 kW         | 3G3RX-A2055-V1 |
|                 |                   | 7.5 kW                         | 11 kW          | 3G3RX-A2075-V1 |
|                 |                   | 11 kW                          | 15 kW          | 3G3RX-A2110-V1 |
|                 |                   | 15 kW                          | 18.5 kW        | 3G3RX-A2150-V1 |
|                 |                   | 18.5 kW                        | 22 kW          | 3G3RX-A2185-V1 |
|                 |                   | 22 kW                          | 30 kW          | 3G3RX-A2220-V1 |
|                 |                   | 30 kW                          | 37 kW          | 3G3RX-A2300-V1 |
|                 |                   | 37 kW                          | 45 kW          | 3G3RX-A2370-V1 |
|                 |                   | 45 kW                          | 55 kW          | 3G3RX-A2450-V1 |
| 3-phase 400 VAC | IP00              | 0.4 kW                         | 0.75 kW        | 3G3RX-A4004-V1 |
|                 |                   | 0.75 kW                        | 1.5 kW         | 3G3RX-A4007-V1 |
|                 |                   | 1.5 kW                         | 2.2 kW         | 3G3RX-A4015-V1 |
|                 |                   | 2.2 kW                         | 3.7 kW         | 3G3RX-A4022-V1 |
|                 |                   | 3.7 kW                         | 5.5 kW         | 3G3RX-A4037-V1 |
|                 |                   | 5.5 kW                         | 7.5 kW         | 3G3RX-A4055-V1 |
|                 |                   | 7.5 kW                         | 11 kW          | 3G3RX-A4075-V1 |
|                 |                   | 11 kW                          | 15 kW          | 3G3RX-A4110-V1 |
|                 |                   | 15 kW                          | 18.5 kW        | 3G3RX-A4150-V1 |
|                 |                   | 18.5 kW                        | 22 kW          | 3G3RX-A4185-V1 |
|                 |                   | 22 kW                          | 30 kW          | 3G3RX-A4220-V1 |
|                 |                   | 30 kW                          | 37 kW          | 3G3RX-A4300-V1 |
|                 |                   | 37 kW                          | 45 kW          | 3G3RX-A4370-V1 |
|                 |                   | 45 kW                          | 55 kW          | 3G3RX-A4450-V1 |
| 55 kW           | 75 kW             | 3G3RX-A4550-V1                 |                |                |
|                 |                   | 75 kW                          | 90 kW          | 3G3RX-B4750-V1 |
|                 |                   | 90 kW                          | 110 kW         | 3G3RX-B4900-V1 |
|                 |                   | 110 kW                         | 132 kW         | 3G3RX-B411K-V1 |
|                 |                   | 132 kW                         | 160 kW         | 3G3RX-B413K-V1 |

Communication Unit

| Name                         | Model          |
|------------------------------|----------------|
| EtherCAT Communication Unit  | 3G3AX-RX-ECT   |
| CompoNet™ Communication Unit | 3G3AX-RX-CRT-E |

## Related Options

| Name                        | Specifications       |   | Model          |
|-----------------------------|----------------------|---|----------------|
| Regenerative Braking Units  | 3-phase 200 VAC      | General purpose with Braking resistor           | 3G3AX-RBU21    |
|                             |                      | High Regeneration purpose with Braking resistor | 3G3AX-RBU22    |
|                             |                      | General purpose for 30 kW *                     | 3G3AX-RBU23    |
|                             |                      | General purpose for 55 kW *                     | 3G3AX-RBU24    |
|                             | 3-phase 400 VAC      | General purpose with Braking resistor           | 3G3AX-RBU41    |
|                             |                      | General purpose for 30 kW *                     | 3G3AX-RBU42    |
| General purpose for 55 kW * |                      | 3G3AX-RBU43                                     |                |
| Braking Resistor            | Compact type         | Resistor 120 W, 180 W                           | 3G3AX-RBA1201  |
|                             |                      | Resistor 120 W, 100 W                           | 3G3AX-RBA1202  |
|                             |                      | Resistor 120 W, 50 W                            | 3G3AX-RBA1203  |
|                             |                      | Resistor 120 W, 35 W                            | 3G3AX-RBA1204  |
|                             | Standard type        | Resistor 200 W, 180 W                           | 3G3AX-RBB2001  |
|                             |                      | Resistor 200 W, 100 W                           | 3G3AX-RBB2002  |
|                             |                      | Resistor 300 W, 50 W                            | 3G3AX-RBB3001  |
|                             |                      | Resistor 400 W, 35 W                            | 3G3AX-RBB4001  |
|                             | Medium capacity type | Resistor 400 W, 50 W                            | 3G3AX-RBC4001  |
|                             |                      | Resistor 600 W, 35 W                            | 3G3AX-RBC6001  |
|                             |                      | Resistor 1200 W, 17 W                           | 3G3AX-RBC12001 |

\* The braking resistor is optionally required.

## Regenerative Braking Unit and Braking Resistor Combination

Select the combination of the regenerative braking unit(s) and the braking resistor(s) as follows, according to your inverter. If the usage rate exceeds 10% ED, or if you need a torque larger than the approximate braking torque, you need to follow the instruction provided in Braking Resistor Selection.

- Inverter:  
Select the model of your inverter. However, the table below assumes that your inverter is used in the heavy load mode and connected to a single motor with the same capacity. Therefore, in the light load mode, a motor with the same capacity means a motor that is one size larger in capacity than the inverter and the converted braking torque decreases accordingly.
- Operating conditions:  
Show the torque during deceleration and the deceleration time (in % ED) calculated as a percentage of the cycle time for 1 cycle of operation including the stop time.
- Braking unit/Braking resistor:  
Show the required the model and number of units.
- Connection form:  
Show the configuration of the regenerative braking unit(s) and braking resistor(s) illustrated in the connection form table below.
- Restrictions:  
Show the maximum deceleration time allowable for the combination shown here and the minimum resistance that can be connected to the inverter's built-in regenerative braking circuit or external regenerative braking unit(s).

| Inverter              |   |                    | Operating conditions |   | Braking unit         |                            | Braking resistor |                            | Con-<br>nec-<br>tion<br>form | Restrictions  |   |
|-----------------------|---|--------------------|----------------------|---|----------------------|----------------------------|------------------|----------------------------|------------------------------|---|---|
| Volt-<br>age<br>class | Max.<br>appli-<br>cable<br>motor<br>ca-<br>pacity<br>(kW) | Model              | %ED<br>(%)           | Ap-<br>proxi-<br>mate<br>braking<br>torque<br>(%) | Model                | Num-<br>ber<br>of<br>units | Model            | Num-<br>ber<br>of<br>units |                              | Allowa-<br>ble<br>contin-<br>uous<br>braking<br>time<br>(s) | Min.<br>con-<br>nect-<br>able<br>resis-<br>tance<br>(Ω) |
| 200-V<br>Class        | 0.4   | 3G3RX-<br>A2004-V1 | 0.03                 | 220%  | Built-in<br>Inverter | ---                        | 3G3AX-RBA1201    | 1                          | 1                            | 20  | 50  |
|                       |   |                    | 0.1                  | 220%  |                      |                            | 3G3AX-RBB2001    | 1                          | 1                            | 30  | 50  |
|                       | 0.75  | 3G3RX-<br>A2007-V1 | 0.03                 | 120%  | Built-in<br>Inverter | ---                        | 3G3AX-RBA1201    | 1                          | 1                            | 20  | 50  |
|                       |   |                    | 0.1                  | 120%  |                      |                            | 3G3AX-RBB2001    | 1                          | 1                            | 30  | 50  |
|                       | 1.5   | 3G3RX-<br>A2015-V1 | 0.025                | 110%  | Built-in<br>Inverter | ---                        | 3G3AX-RBA1202    | 1                          | 1                            | 12  | 35  |
|                       |   |                    | 0.1                  | 215%  |                      |                            | 3G3AX-RBC4001    | 1                          | 1                            | 10  | 35  |
|                       | 2.2   | 3G3RX-<br>A2022-V1 | 0.03                 | 150%  | Built-in<br>Inverter | ---                        | 3G3AX-RBB3001    | 1                          | 1                            | 30  | 35  |
|                       |   |                    | 0.1                  | 150%  |                      |                            | 3G3AX-RBC4001    | 1                          | 1                            | 10  | 35  |
|                       | 3.7   | 3G3RX-<br>A2037-V1 | 0.03                 | 125%  | Built-in<br>Inverter | ---                        | 3G3AX-RBB4001    | 1                          | 1                            | 20  | 35  |
|                       |   |                    | 0.1                  | 125%  |                      |                            | 3G3AX-RBC6001    | 1                          | 1                            | 10  | 35  |
|                       | 5.5   | 3G3RX-<br>A2055-V1 | 0.03                 | 120%  | Built-in<br>Inverter | ---                        | 3G3AX-RBB3001    | 2                          | 2                            | 30  | 16  |
|                       |   |                    | 0.1                  | 120%  |                      |                            | 3G3AX-RBC4001    | 2                          | 2                            | 10  | 16  |
|                       | 7.5   | 3G3RX-<br>A2075-V1 | 0.03                 | 125%  | Built-in<br>Inverter | ---                        | 3G3AX-RBB4001    | 2                          | 2                            | 20  | 10  |
|                       |   |                    | 0.1                  | 125%  |                      |                            | 3G3AX-RBC6001    | 2                          | 2                            | 10  | 10  |

|      |                |                |                |                   |                   |                   |                |               |    |    |     |     |
|------|----------------|----------------|----------------|-------------------|-------------------|-------------------|----------------|---------------|----|----|-----|-----|
|      | 11             | 3G3RX-A2110-V1 | 0.03           | 125%              | Built-in Inverter | ---               | 3G3AX-RBB4001  | 3             | 4  | 20 | 10  |     |
|      |                |                | 0.1            | 125%              |                   | ---               | 3G3AX-RBC6001  | 3             | 4  | 10 | 10  |     |
|      | 15             | 3G3RX-A2150-V1 | 0.03           | 130%              | Built-in Inverter | ---               | 3G3AX-RBC12001 | 2             | 2  | 10 | 7.5 |     |
|      |                |                | 0.1            | 130%              |                   | ---               | 3G3AX-RBC12001 | 2             | 2  | 10 | 7.5 |     |
|      | 18.5           | 3G3RX-A2185-V1 | 0.03           | 105%              | Built-in Inverter | ---               | 3G3AX-RBC12001 | 2             | 2  | 10 | 7.5 |     |
|      |                |                | 0.1            | 105%              |                   | ---               | 3G3AX-RBC12001 | 2             | 2  | 10 | 7.5 |     |
|      | 22             | 3G3RX-A2220-V1 | 0.03           | 130%              | Built-in Inverter | ---               | 3G3AX-RBC12001 | 3             | 4  | 10 | 5   |     |
|      |                |                | 0.1            | 130%              |                   | ---               | 3G3AX-RBC12001 | 3             | 4  | 10 | 5   |     |
|      | 30             | 3G3RX-A2300-V1 | 0.03           | 160%              | 3G3AX-RBU24       | 1                 | 3G3AX-RBC12001 | 5             | 11 | 10 | 2   |     |
|      |                |                | 0.1            | 160%              | 3G3AX-RBU24       | 1                 | 3G3AX-RBC12001 | 5             | 11 | 10 | 2   |     |
|      | 37             | 3G3RX-A2370-V1 | 0.03           | 130%              | 3G3AX-RBU24       | 1                 | 3G3AX-RBC12001 | 5             | 11 | 10 | 2   |     |
|      |                |                | 0.1            | 130%              | 3G3AX-RBU24       | 1                 | 3G3AX-RBC12001 | 5             | 11 | 10 | 2   |     |
|      | 45             | 3G3RX-A2450-V1 | 0.03           | 130%              | 3G3AX-RBU24       | 1                 | 3G3AX-RBC12001 | 6             | 12 | 10 | 2   |     |
|      |                |                | 0.1            | 130%              | 3G3AX-RBU24       | 1                 | 3G3AX-RBC12001 | 6             | 12 | 10 | 2   |     |
|      | 55             | 3G3RX-A2550-V1 | 0.03           | 120%              | 3G3AX-RBU24       | 1                 | 3G3AX-RBC12001 | 7             | 13 | 10 | 2   |     |
|      |                |                | 0.1            | 120%              | 3G3AX-RBU24       | 1                 | 3G3AX-RBC12001 | 7             | 13 | 10 | 2   |     |
|      | 400-V Class    | 0.4            | 3G3RX-A4004-V1 | 0.03              | 220%              | Built-in Inverter | ---            | 3G3AX-RBA1201 | 2  | 3  | 20  | 100 |
|      |                |                |                | 0.1               | 220%              |                   | ---            | 3G3AX-RBB2001 | 2  | 3  | 30  | 100 |
|      |                | 0.75           | 3G3RX-A4007-V1 | 0.03              | 220%              | Built-in Inverter | ---            | 3G3AX-RBA1201 | 2  | 3  | 20  | 100 |
|      |                |                |                | 0.1               | 220%              |                   | ---            | 3G3AX-RBB2001 | 2  | 3  | 30  | 100 |
| 1.5  |                | 3G3RX-A4015-V1 | 0.03           | 120%              | Built-in Inverter | ---               | 3G3AX-RBA1201  | 2             | 3  | 20 | 100 |     |
|      |                |                | 0.1            | 120%              |                   | ---               | 3G3AX-RBB2001  | 2             | 3  | 30 | 100 |     |
| 2.2  |                | 3G3RX-A4022-V1 | 0.025          | 150%              | Built-in Inverter | ---               | 3G3AX-RBA1202  | 2             | 3  | 12 | 100 |     |
|      |                |                | 0.1            | 220%              |                   | ---               | 3G3AX-RBC4001  | 2             | 3  | 10 | 100 |     |
| 3.7  |                | 3G3RX-A4037-V1 | 0.03           | 175%              | Built-in Inverter | ---               | 3G3AX-RBB3001  | 2             | 3  | 30 | 70  |     |
|      |                |                | 0.1            | 175%              |                   | ---               | 3G3AX-RBC4001  | 2             | 3  | 10 | 70  |     |
| 5.5  |                | 3G3RX-A4055-V1 | 0.03           | 120%              | Built-in Inverter | ---               | 3G3AX-RBB3001  | 2             | 3  | 30 | 70  |     |
|      |                |                | 0.1            | 120%              |                   | ---               | 3G3AX-RBC4001  | 2             | 3  | 10 | 70  |     |
| 7.5  |                | 3G3RX-A4075-V1 | 0.03           | 125%              | Built-in Inverter | ---               | 3G3AX-RBB4001  | 2             | 3  | 20 | 35  |     |
|      |                |                | 0.1            | 125%              |                   | ---               | 3G3AX-RBC6001  | 2             | 3  | 10 | 35  |     |
| 11   |                | 3G3RX-A4110-V1 | 0.03           | 120%              | Built-in Inverter | ---               | 3G3AX-RBB3001  | 4             | 5  | 30 | 35  |     |
|      |                |                | 0.1            | 120%              |                   | ---               | 3G3AX-RBC4001  | 4             | 5  | 10 | 35  |     |
| 15   |                | 3G3RX-A4150-V1 | 0.03           | 125%              | Built-in Inverter | ---               | 3G3AX-RBB4001  | 4             | 5  | 20 | 24  |     |
|      |                |                | 0.1            | 125%              |                   | ---               | 3G3AX-RBC6001  | 4             | 5  | 10 | 24  |     |
| 18.5 |                | 3G3RX-A4185-V1 | 0.03           | 140%              | Built-in Inverter | ---               | 3G3AX-RBB3001  | 8             | 6  | 30 | 24  |     |
|      |                |                | 0.1            | 140%              |                   | ---               | 3G3AX-RBC4001  | 8             | 6  | 10 | 24  |     |
| 22   | 3G3RX-A4220-V1 | 0.03           | 120%           | Built-in Inverter | ---               | 3G3AX-RBB3001     | 8              | 6             | 30 | 20 |     |     |
|      |                | 0.1            | 120%           |                   | ---               | 3G3AX-RBC4001     | 8              | 6             | 10 | 20 |     |     |
| 30   | 3G3RX-A4300-V1 | 0.03           | 130%           | 3G3AX-RBU42       | 1                 | 3G3AX-RBC12001    | 4              | 8             | 10 | 10 |     |     |
|      |                | 0.1            | 130%           | 3G3AX-RBU42       | 1                 | 3G3AX-RBC12001    | 4              | 8             | 10 | 10 |     |     |
| 37   | 3G3RX-A4370-V1 | 0.03           | 155%           | 3G3AX-RBU43       | 1                 | 3G3AX-RBC12001    | 6              | 9             | 10 | 6  |     |     |
|      |                | 0.1            | 155%           | 3G3AX-RBU43       | 1                 | 3G3AX-RBC12001    | 6              | 9             | 10 | 6  |     |     |
| 45   | 3G3RX-A4450-V1 | 0.03           | 130%           | 3G3AX-RBU43       | 1                 | 3G3AX-RBC12001    | 6              | 9             | 10 | 6  |     |     |
|      |                | 0.1            | 130%           | 3G3AX-RBU43       | 1                 | 3G3AX-RBC12001    | 6              | 9             | 10 | 6  |     |     |
| 55   | 3G3RX-A4550-V1 | 0.03           | 140%           | 3G3AX-RBU43       | 1                 | 3G3AX-RBC12001    | 8              | 10            | 10 | 6  |     |     |
|      |                | 0.1            | 140%           | 3G3AX-RBU43       | 1                 | 3G3AX-RBC12001    | 8              | 10            | 10 | 6  |     |     |
| 75   | 3G3RX-A4750-V1 | 0.03           | 130%           | 3G3AX-RBU43       | 1                 | 3G3AX-RBC12001    | 10             | 14            | 10 | 6  |     |     |
|      |                | 0.1            | 130%           | 3G3AX-RBU43       | 1                 | 3G3AX-RBC12001    | 10             | 14            | 10 | 6  |     |     |
| 90   | 3G3RX-A4900-V1 | 0.03           | 105%           | 3G3AX-RBU43       | 1                 | 3G3AX-RBC12001    | 10             | 14            | 10 | 6  |     |     |
|      |                | 0.1            | 105%           | 3G3AX-RBU43       | 1                 | 3G3AX-RBC12001    | 10             | 14            | 10 | 6  |     |     |
| 110  | 3G3RX-A411K-V1 | 0.03           | 105%           | 3G3AX-RBU43       | 2                 | 3G3AX-RBC12001    | 12             | 15            | 10 | 6  |     |     |
|      |                | 0.1            | 105%           | 3G3AX-RBU43       | 2                 | 3G3AX-RBC12001    | 12             | 15            | 10 | 6  |     |     |

|  |     |                |      |      |             |   |                |    |    |    |   |
|--|-----|----------------|------|------|-------------|---|----------------|----|----|----|---|
|  | 132 | 3G3RX-A413K-V1 | 0.03 | 115% | 3G3AX-RBU43 | 2 | 3G3AX-RBC12001 | 16 | 16 | 10 | 6 |
|  |     |                | 0.1  | 115% | 3G3AX-RBU43 | 2 | 3G3AX-RBC12001 | 16 | 16 | 10 | 6 |

| Name               | Model      |
|--------------------|------------|
| Radio Noise Filter | 3G3AX-ZCL2 |
|                    | 3G3AX-ZCL1 |

| Name                | Specifications of Inverter          |   |   | Model       |
|---------------------|-------------------------------------|---|---|-------------|
|                     | Voltage class                       | CT: Heavy load (kW)   | VT: Light load (kW)   |             |
| Input Noise Filter  | 3-phase 200 VAC                     | 0.4 to 0.75   | 0.75  | 3G3AX-NFI21 |
|                     |                                     | 1.5   | 1.5   | 3G3AX-NFI22 |
|                     |                                     | 2.2, 3.7  | 2.2, 3.7  | 3G3AX-NFI23 |
|                     |                                     | 5.5   | 5.5   | 3G3AX-NFI24 |
|                     |                                     | 7.5   | 7.5   | 3G3AX-NFI25 |
|                     |                                     | 11  | 11  | 3G3AX-NFI26 |
|                     |                                     | 15  | 15  | 3G3AX-NFI27 |
|                     |                                     | 18.5  | 18.5  | 3G3AX-NFI28 |
|                     |                                     | 22, 30  | 22, 30  | 3G3AX-NFI29 |
|                     |                                     | 37  | 37  | 3G3AX-NFI2A |
|                     | 45                                  | 45  | 3G3AX-NFI2B   |             |
|                     | 55                                  | 55  | 3G3AX-NFI2C   |             |
|                     | 3-phase 400 VAC                     | 0.4 to 2.2  | 0.75 to 2.2   | 3G3AX-NFI41 |
|                     |                                     | 3.7   | 3.7   | 3G3AX-NFI42 |
|                     |                                     | 5.5, 7.5  | 5.5, 7.5  | 3G3AX-NFI43 |
|                     |                                     | 11  | 11  | 3G3AX-NFI44 |
|                     |                                     | 15  | 15  | 3G3AX-NFI45 |
|                     |                                     | 18.5  | 18.5  | 3G3AX-NFI46 |
|                     |                                     | 22  | 22  | 3G3AX-NFI47 |
|                     |                                     | 30  | 30  | 3G3AX-NFI48 |
| 37                  |                                     | 37  | 3G3AX-NFI49   |             |
| 45, 55              |                                     | 45, 55  | 3G3AX-NFI4A   |             |
| EMC Noise Filter *  | 3-phase 200 VAC                     | 0.4 to 7.5  | 0.75  | 3G3AX-EFI41 |
|                     |                                     | 1.5   | 1.5   | 3G3AX-EFI42 |
|                     |                                     | 2.2, 3.7  | 2.2, 3.7  | 3G3AX-EFI43 |
|                     |                                     | 5.5   | 5.5   | 3G3AX-EFI44 |
|                     |                                     | 7.5   | 7.5   | 3G3AX-EFI45 |
|                     |                                     | 11  | 11  | 3G3AX-EFI47 |
|                     |                                     | 15  | 15  | 3G3AX-EFI48 |
|                     |                                     | 18.5  | 18.5  | 3G3AX-EFI49 |
|                     |                                     | 22, 30  | 22, 30  | 3G3AX-EFI4A |
|                     |                                     | 37  | 37  | 3G3AX-EFI4B |
|                     | 3-phase 400 VAC                     | 0.4 to 22   | 0.75 to 2.2   | 3G3AX-EFI41 |
|                     |                                     | 3.7   | 3.7   | 3G3AX-EFI42 |
|                     |                                     | 5.5, 7.5  | 5.5, 7.5  | 3G3AX-EFI43 |
|                     |                                     | 11  | 11  | 3G3AX-EFI44 |
|                     |                                     | 15  | 15  | 3G3AX-EFI45 |
|                     |                                     | 18.5  | 18.5  | 3G3AX-EFI46 |
|                     |                                     | 22  | 22  | 3G3AX-EFI47 |
|                     |                                     | 30  | 30  | 3G3AX-EFI48 |
|                     |                                     | 37  | 37  | 3G3AX-EFI49 |
|                     |                                     | 45, 55  | 45, 55  | 3G3AX-EFI4A |
| 75, 90              | 75, 90                              | 3G3AX-EFI4B   |   |             |
| Output Noise Filter | 3-phase 200 VAC/<br>3-phase 400 VAC | Applicable motor<br>200 V class: 0.4 to 0.75<br>400 V class: 0.4 to 2.2 | Applicable motor<br>200 V class: 0.75<br>400 V class: 0.75 to 2.2   | 3G3AX-NFO01 |
|                     |                                     | Applicable motor<br>200 V class: 1.5, 2.2<br>400 V class: 3.7           | Applicable motor<br>200 V class: 1.5, 2.2<br>400 V class: 3.7       | 3G3AX-NFO02 |
|                     |                                     | Applicable motor<br>200 V class: 3.7, 5.5<br>400 V class: 5.5 to 11     | Applicable motor<br>200 V class: 3.7, 5.5<br>400 V class: 5.5 to 11 | 3G3AX-NFO03 |
|                     |                                     | Applicable motor<br>200 V class: 7.5, 11<br>400 V class: 15 to 22       | Applicable motor<br>200 V class: 7.5, 11<br>400 V class: 15 to 22   | 3G3AX-NFO04 |
|                     |                                     | Applicable motor<br>200 V class: 15<br>400 V class: 30, 37              | Applicable motor<br>200 V class: 15<br>400 V class: 30, 37          | 3G3AX-NFO05 |
|                     |                                     | Applicable motor  | Applicable motor  | 3G3AX-NFO06 |

|            |                 |  |  |              |              |
|------------|-----------------|--|--|--------------|--------------|
|            |                 | 200 V class: 18.5, 22<br>400 V class: 45                       | 200 V class: 18.5, 22<br>400 V class: 45                       |              |              |
|            |                 | Applicable motor<br>200 V class: 30, 37<br>400 V class: 55, 75 | Applicable motor<br>200 V class: 30, 37<br>400 V class: 55, 75 | 3G3AX-NFO07  |              |
| DC Reactor | 3-phase 200 VAC | 0.4  | ---  | 3G3AX-DL2004 |              |
|            |                 | 0.75   | 0.75   | 3G3AX-DL2007 |              |
|            |                 | 1.5  | 1.5  | 3G3AX-DL2015 |              |
|            |                 | 2.2  | 2.2  | 3G3AX-DL2022 |              |
|            |                 | 3.7  | 3.7  | 3G3AX-DL2037 |              |
|            |                 | 5.5  | 5.5  | 3G3AX-DL2055 |              |
|            |                 | 7.5  | 7.5  | 3G3AX-DL2075 |              |
|            |                 | 11   | 11   | 3G3AX-DL2110 |              |
|            |                 | 15   | 15   | 3G3AX-DL2150 |              |
|            |                 | 18.5, 22   | 18.5, 22   | 3G3AX-DL2220 |              |
|            |                 | 30   | 30   | 3G3AX-DL2300 |              |
|            |                 | 37   | 37   | 3G3AX-DL2370 |              |
|            |                 | 45   | 45   | 3G3AX-DL2450 |              |
|            |                 | 55   | 55   | 3G3AX-DL2550 |              |
|            | 3-phase 400 VAC | 0.4  | ---  | 3G3AX-DL4004 |              |
|            |                 | 0.75   | 0.75   | 3G3AX-DL4007 |              |
|            |                 | 1.5  | 1.5  | 3G3AX-DL4015 |              |
|            |                 | 2.2  | 2.2  | 3G3AX-DL4022 |              |
|            |                 | 3.7  | 3.7  | 3G3AX-DL4037 |              |
|            |                 | 5.5  | 5.5  | 3G3AX-DL4055 |              |
|            |                 | 7.5  | 7.5  | 3G3AX-DL4075 |              |
|            |                 | 11   | 11   | 3G3AX-DL4110 |              |
|            |                 | 15   | 15   | 3G3AX-DL4150 |              |
|            |                 | 18.5, 22   | 18.5, 22   | 3G3AX-DL4220 |              |
|            |                 | 30   | 30   | 3G3AX-DL4300 |              |
|            |                 | 37   | 37   | 3G3AX-DL4370 |              |
| 45         | 45              | 3G3AX-DL4450   |  |              |              |
| 55         | 55              | 3G3AX-DL4550   |  |              |              |
| AC Reactor | 3-phase 200 VAC | 0.4 to 1.5   | 0.75 to 1.5  | 3G3AX-AL2025 |              |
|            |                 | 2.2, 3.7   | 2.2, 3.7   | 3G3AX-AL2055 |              |
|            |                 | 5.5, 7.5   | 5.5, 7.5   | 3G3AX-AL2110 |              |
|            |                 | 11, 15   | 11, 15   | 3G3AX-AL2220 |              |
|            |                 | 18.5, 22   | 18.5, 22   | 3G3AX-AL2330 |              |
|            |                 | 30, 37   | 30, 37   | 3G3AX-AL2500 |              |
|            |                 | 45, 55   | 45, 55   | 3G3AX-AL2750 |              |
|            |                 | 3-phase 400 VAC  | 0.4 to 1.5   | 0.75 to 1.5  | 3G3AX-AL4025 |
|            |                 |  | 2.2, 3.7   | 2.2, 3.7     | 3G3AX-AL4055 |
|            | 5.5, 7.5        |  | 5.5, 7.5   | 3G3AX-AL4110 |              |
|            | 11, 15          |  | 11, 15   | 3G3AX-AL4220 |              |
|            | 18.5, 22        |  | 18.5, 22   | 3G3AX-AL4330 |              |
|            | 30, 37          |  | 30, 37   | 3G3AX-AL4500 |              |
|            | 45, 55          |  | 45, 55   | 3G3AX-AL4750 |              |

\* Although an EMC Noise Filter is built into the RX, it may be necessary to provide another EMC Noise Filter when the cable between the Motor and the Inverter is long.




| Name                              | Specifications                    | Model       |
|-----------------------------------|-----------------------------------|-------------|
| PG Board                          | For Position or Frequency Control | 3G3AX-PG01  |
| Digital Operator                  | ---                               | 3G3AX-OP01  |
| Digital Operator Connecting Cable | Cable Length 1 m                  | 3G3AX-OPCN1 |
|                                   | Cable Length 3 m                  | 3G3AX-OPCN3 |

#### Recommended EtherCAT Communications Cables

Use Straight STP (shielded twisted-pair) cable of category 5 or higher with double shielding (braiding and aluminum foil tape) for EtherCAT.

#### Cable with Connectors

| Item | Appearance | Recommended manufacturer | Cable length (m) | Model |
|------|------------|--------------------------|------------------|-------|
|------|------------|--------------------------|------------------|-------|

|  |   |       |     |                      |
|--|---|-------|-----|----------------------|
| Cable with Connectors on Both Ends (RJ45/RJ45)<br>Standard RJ45 plugs type *1<br>Wire Gauge and Number of Pairs:<br>AWG26, 4-pair cable<br>Cable Sheath material: LSZH *2<br>Cable color: Yellow *3                                      |    | OMRON | 0.3 | XS6W-6LSZH8SS30CM-Y  |
|  |   |       | 0.5 | XS6W-6LSZH8SS50CM-Y  |
|  |   |       | 1   | XS6W-6LSZH8SS100CM-Y |
|  |   |       | 2   | XS6W-6LSZH8SS200CM-Y |
|  |   |       | 3   | XS6W-6LSZH8SS300CM-Y |
| Cable with Connectors on Both Ends (RJ45/RJ45)<br>Rugged RJ45 plugs type *1<br>Wire Gauge and Number of Pairs:<br>AWG22, 2-pair cable<br>Cable color: Light blue   |  | OMRON | 0.3 | XS5W-T421-AMD-K      |
|  |   |       | 0.5 | XS5W-T421-BMD-K      |
|  |   |       | 1   | XS5W-T421-CMD-K      |
|  |   |       | 2   | XS5W-T421-DMD-K      |
|  |   |       | 5   | XS5W-T421-GMD-K      |
| Cable with Connectors on Both Ends (M12 Straight/M12 Straight)<br>Shield Strengthening Connector cable *4<br>M12/Smartclick Connectors<br>Wire Gauge and Number of Pairs:<br>AWG22, 2-pair cable<br>Cable color: Black                   |  | OMRON | 0.5 | XS5W-T421-BM2-SS     |
|  |   |       | 1   | XS5W-T421-CM2-SS     |
|  |   |       | 2   | XS5W-T421-DM2-SS     |
|  |   |       | 3   | XS5W-T421-EM2-SS     |
|  |   |       | 5   | XS5W-T421-GM2-SS     |
| Cable with Connectors on Both Ends (M12 Straight/RJ45)<br>Shield Strengthening Connector cable *4<br>M12/Smartclick Connectors<br>Rugged RJ45 plugs type<br>Wire Gauge and Number of Pairs:<br>AWG22, 2-pair cable<br>Cable color: Black |  | OMRON | 0.5 | XS5W-T421-BMC-SS     |
|  |   |       | 1   | XS5W-T421-CMC-SS     |
|  |   |       | 2   | XS5W-T421-DMC-SS     |
|  |   |       | 3   | XS5W-T421-EMC-SS     |
|  |   |       | 5   | XS5W-T421-GMC-SS     |
|  |   |       | 10  | XS5W-T421-JMD-K      |
|  |   |       | 10  | XS5W-T421-JM2-SS     |
|  |   |       | 10  | XS5W-T421-JMC-SS     |
|  |   |       | 10  | XS5W-T421-JMC-SS     |
|  |   |       | 10  | XS5W-T421-JMC-SS     |

\*1 Standard type cables length 0.2, 0.3, 0.5, 1, 1.5, 2, 3, 5, 7.5, 10, 15 and 20 m are available.

Rugged type cables length 0.3, 0.5, 1, 2, 3, 5, 10 and 15 m are available.

For details, refer to Cat.No.G019.

\*2 The lineup features Low Smoke Zero Halogen cables for in-cabinet use and PUR cables for out-of-cabinet use.

Although the LSZH cable is single shielded, its communications and noise characteristics meet the standards.

\*3 Cables colors are available in blue, yellow, or Green.

\*4 For details, contact your OMRON representative.


#### Cables/Connectors

Wire Gauge and Number of Pairs: AWG24, 4-pair Cable

| Item            | Appearance | Recommended manufacturer     | Model                         |
|-----------------|------------|------------------------------|-------------------------------|
| Cables          | ---        | Hitachi Metals, Ltd.         | NETSTAR-C5E SAB 0.5 x 4P CP * |
|                 | ---        | Kuramo Electric Co.          | KETH-SB *                     |
|                 | ---        | SWCC Showa Cable Systems Co. | FAE-5004 *                    |
| RJ45 Connectors | ---        | Panduit Corporation          | MPS588-C *                    |

\* We recommend you to use above cable and connector together.

Wire Gauge and Number of Pairs: AWG22, 2-pair Cable

| Item                    | Appearance  | Recommended manufacturer | Model          |
|-------------------------|---|--------------------------|----------------|
| Cables                  | ---   | Kuramo Electric Co.      | KETH-PSB-OMR * |
|                         | ---   | JMACS Japan Co., Ltd.    | PNET/B *       |
| RJ45 Assembly Connector |  | OMRON                    | XS6G-T421-1 *  |

\* We recommend you to use above cable and connector together.

#### Software

##### How to Select Required Support Software for Your Controller

The required Support Software depends on the Controller to connect. Please check the following table when purchasing the Support Software.

| Item       | Omron PLC System  | Omron Machine Automation Controller System                  |
|------------|---|---|
| Controller | CS, CJ, CP, and other series  | NJ/NX-series  |
| Inverter   | Inverter RX-series V1 type<br>Inverter RX-series V1 type with CompoNet™ Communication Unit<br>Inverter RX-series V1 type with DeviceNet™ Communication Unit | Inverter RX-series V1 type with EtherCAT Communication Unit |
| Software   | FA Integrated Tool Package CX-One (CX-Drive: Version 2.72 or higher)  | Automation Software Sysmac Studio (Version 1.03 or higher)  |

## FA Integrated Tool Package CX-One

| Product name                                      | Specifications  |                    |       | Model                 |
|---|---|--------------------|-------|-----------------------|
|   |   | Number of licenses | Media |                       |
| <b>FA Integrated Tool Package CX-One Ver.4.[]</b> | <p>The CX-One is a comprehensive software package that integrates Support Software for OMRON PLCs and components.</p> <p>CX-One runs on the following OS.</p> <p>Windows XP (Service Pack 3 or higher, 32-bit version) /<br/>                     Windows Vista (32-bit/64-bit version) /<br/>                     Windows 7 (32-bit/64-bit version) /<br/>                     Windows 8 (32-bit/64-bit version) /<br/>                     Windows 8.1 (32-bit/64-bit version) /<br/>                     Windows 10 (32-bit/64-bit version)</p> <p>CX-One Version 4.[] includes CX-Drive Ver.2.[].<br/>                     For details, refer to the CX-One catalog (Cat. No. R134)</p> | 1 license *        | DVD   | <b>CXONE-AL01D-V4</b> |

\* Multi licenses (3, 10, 30, or 50 licenses) and DVD media without licenses are also available for the CX-One.

## Automation Software Sysmac Studio

Please purchase a DVD and required number of licenses the first time you purchase the Sysmac Studio. DVDs and licenses are available individually. Each model of licenses does not include any DVD.

| Product name                                      | Specifications   |                    |       | Model                |
|---|--|--------------------|-------|----------------------|
|   |  | Number of licenses | Media |                      |
| <b>Sysmac Studio Standard Edition Ver.1.[] []</b> | <p>The Sysmac Studio is the software that provides an integrated environment for setting, programming, debugging and maintenance of machine automation controllers including the NJ/NX-series CPU Units, NY-series Industrial PC, EtherCAT Slave, and the HMI.</p> <p>Sysmac Studio runs on the following OS.</p> <p>Windows 7 (32-bit/64-bit version)/<br/>                     Windows 8(32-bit/64-bit version)/<br/>                     Windows 8.1(32-bit/64-bit version)/<br/>                     Windows 10 (32-bit/64-bit version)</p> <p>The Sysmac Studio Standard Edition DVD includes Support Software to set up EtherNet/IP Units, DeviceNet™ slaves, Serial Communications Units, and Support Software for creating screens on HMIs (CX-Designer).<br/>                     For details, refer to your OMRON website.</p> | -<br>(Media only)  | DVD   | <b>SYSMAC-SE200D</b> |
|   |  | 1 license *        | ---   | <b>SYSMAC-SE201L</b> |

\* Multi licenses are available for the Sysmac Studio (3, 10, 30, or 50 licenses).

## Communications Cable

| Name                              | Specifications                      | Model               |
|-----------------------------------|-------------------------------------|---------------------|
| Communications cable for CX-Drive | USB Cable for JX and RX series (2m) | <b>3G3AX-PCACN2</b> |

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