

Remote Operator (JVOP-137) Remote Interface (JVOP-138) User's Manual

FOR VARISPEED 600 SERIES

Please read this manual in its entirety prior to installing this product. Keep this manual in a safe place for future reference.

The remote operator (JVOP-137) incorporated with the digital operator (model JVOP-130), constitute the operator's panel which can operate a G5 inverter via serial communication at up to 100m from the inverter.

When operation or monitoring is performed by the remote operator, it is necessary to mount the remote interface (model JVOP-138) on the inverter.

The remote operator and monitor can be used with the following series of inverters:

VS-616G5 Series

Safety Notes



Be sure to shut off the main inverter power and wait at least 1 minute until all the display lamps on the inverter unit are off before removing the digital operator (JVOP-130) and mounting the remote interface (JVOP-138) and remote operator (JVOP-137).

Failure to due so may result in electrocution or damage to the inverter.

Never connect or disconnect communication cables while the power is on.

Failure to due so may result in electrocution or damage to the inverter.

1. Specifications For the Remote Operator and Remote Interface

| Name | Model | Code Number | Specifications |
|------------------|----------|-------------|--|
| Remote Operator | JVOP-137 | 73616-V1370 | 20mA Current Loop Power Source: AC85~264V 50~60H _Z (w/ D-SUB connector, cover, power connector) |
| Remote Interface | JVOP-138 | 73616-V1380 | 20mA Current Loop / RS-232C (w/ D-SUB connector, cover) |

2. Environmental Specifications of Remote Operator and Remote Interface

| Item | Specifications | | | |
|-----------------------------|---|---|--|--|
| Temp/Humid- ity Range | -20 ~ +60°C | | | |
| Operating Temperature Range | -10 ~ +50°C | | | |
| Operating Humidity | 90%RH or lower (no condensation) | | | |
| Vibration Acceleration | Tolerance up to 9.8m/s^2 (1G) at less than 20HZ, 1.96m/s^2 at $20 \sim 50 \text{HZ}$ (0.2G). | | | |
| Usage Environ- ment | No exposure to rain or splashing Little dust or metal shavings No exposure to direct sunlight | | | |
| External Dimensions | Remote Operator Width:80, Height:250, Depth74 (mm) | Remote Interface Width:70, Height:140, Depth18 (mm) | | |

3. Connection with Inverter Unit

The communication cable connected with the ASY connector to the inverter-mounted remote interface and remote operator.

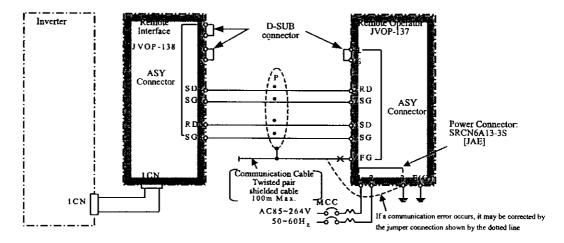


Figure 1: Wiring of Power and Communication Cables

Notes:

- In order to prevent the devices from malfunctioning due to noise, be sure to use twisted pair shielded cable and separate them from high voltage circuitry (200 VAC or more) or relay circuits.
- 2. Twisted-pair shielded cable conductor size must be 0.5 mm² or larger. When twisted-pair cable of 3P (3 pairs) or more is used, connect both ends of the cable, which are not used in the shielded wiring, to 0 V of connector terminal 7 or 8.
- 3. The signal level is a 20mA current loop. The wiring range must be 100m or less.
- 4. The attached connector is as described below:

Connector: DE-9PN-compatible or equivalent

JVOP-137 Cover: 17JE-09H-1B-compatible (wire feed aperture f6mm)

Power Connector: SRCN6A13-3S

Connector: DE-9PN-compatible or equivalent

JVOP-138 Cover: 17JE-09H-1B-compatible (wire feed aperture f6mm)

- 5. If a communication fault ("CPF ") occurs, it may be corrected by connecting the shielded cable directly to terminal 3 or E (G) instead of to the remote/monitor ASY connector terminal 9.
- 6. Use cable clamps so that the cable weight or tensile force will not be applied directly to the connectors.

4. Dimensional Drawings of the Remote Operator

Either wall or panel mounting is possible by changing the mounting bracket.

