Fuji Electric
*Innovating Energy Technology*

High Performance Vctor Control Inverter

# FRENIC-VG

## PROFIBUS-DP Interface Card

# OPC-VG1-PDP

## Product Specification

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**Drive Development Project Dept.**

| | Date | Sign |
|---|---|---|
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## 1. Overview

This product is an interface card for connecting with Fuji High Performance Vctor Control Inverter FRENIC-VG series and PROFIBUS DP master, such as PLC and a personal computer.

Operation and speed commands are given, or setting change and a check of a function code are attained from PROFIBUS DP master.

## 2. Specification

### 2-1. Connection Ports

This card can be connected to C- port on the inverter.

### 2-2. Applicable ROM Version

This card corresponds to the following inverter software version.

A software version can be checked on the maintenance information of a touch panel.

MAIN = H1 0020 or later, MTR= H2 0020 or later

### 2-3. Specification

**Table1 Specification**

| Item | | Specifications |
|---|---|---|
| Transmission specification | | RS-485 communication |
| Transmission speed | | 9.6 kbps to 12Mbps |
| Total extended distance | | 100m (at 12Mbps) to 1200m (at 9.6kbps) |
| Number of words to be transmitted | | 20 words at maximum (Input area 10 words/Output area 10 words) |
| Communication connector | | Detachable 6-pin terminal block (Phoenix Contact MC1.5/6-STF-3.5) |
| Rotary switch SW1, SW2 | | Setting of node address. You can assign any node address from 1 to 99.<br>You can also use the inverter function code U13 to set node address from 100 to 125. |
| Status display LED<br>PWR, ERR, ONL, OFFL | | PWR : Lights in green at normal communication. Blinks in red at abnormal communication.<br>ERR : Blinks in red at setting error.<br>ONL : Lights in green at normal communication.<br>OFFL : Lights in red at abnormal communication. |
| PROFIBUS DP version | | DP-V0 |
| Operation | Operation command | Command issued using CTW (control word) or command issued using function code S06 |
| | Speed command | Command issued using MRV or command issued using control function code S01 |
| | Operation status output | Status monitor using STW (status word) |
| | | Monitoring of motor speed using function code M code and torque current command |
| Option function code | | o30, o31, o122～125, o160～163, U01 to U13 |
| Protective function | | *er4* : Network error (PROFIBUS communication error) (*2)<br>*Minor communication failure: You can set operation at occurrence of *er4* alarm using o30 or o31.<br>*Serious communication error: *er4* alarm is issued immediately. |

## 3. Outline

SA5A0380

## 4. Revision History

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