



|              |   |              |   |               |  |               |  |               |  |               |  |
|--------------|---|--------------|---|---------------|--|---------------|--|---------------|--|---------------|--|
| DF20-M-8DI-N | Digital input module, 8 ports, NPN, 24VDC | DF20-M-8DI-P | Digital input module, 8 ports, PNP, 24VDC | DF20-M-16DI-N | Digital input module, 16 ports, NPN, 24VDC | DF20-M-16DI-P | Digital input module, 16 ports, PNP, 24VDC | DF20-M-32DI-N | Digital input module, 32 ports, NPN, 24VDC | DF20-M-32DI-P | Digital input module, 32 ports, PNP, 24VDC |
|--------------|---|--------------|---|---------------|--|---------------|--|---------------|--|---------------|--|

| Specification         |                         |              |               |               |               |               |               |               |               |               |               |
|-----------------------|-------------------------|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Product               | DF20-M-8DI-N            | DF20-M-8DI-P | DF20-M-16DI-N | DF20-M-16DI-P | DF20-M-32DI-N | DF20-M-32DI-P | DF20-M-32DI-N | DF20-M-32DI-P | DF20-M-32DI-N | DF20-M-32DI-P | DF20-M-32DI-P |
| Number of channels    | 8                       | 8            | 16            | 16            | 32            | 32            | 32            | 32            | 32            | 32            | 32            |
| Data size             | 1 Byte                  |              | 2 Byte        |               | 4 Byte        |               |               |               |               |               |               |
| Signal type           | NPN                     | PNP          | NPN           | PNP           | NPN           | PNP           | NPN           | PNP           | NPN           | PNP           | PNP           |
| "0" signal voltage    | 18V...32V               | 0V...4V      | 18V...32V     | 0V...4V       | 18V...32V     | 0V...4V       | 18V...32V     | 0V...4V       | 18V...32V     | 0V...4V       | 0V...4V       |
| "1" signal voltage    | 0V...4V                 | 18V...32V    | 0V...4V       | 18V...32V     | 0V...4V       | 18V...32V     | 0V...4V       | 18V...32V     | 0V...4V       | 18V...32V     | 18V...32V     |
| Connection type       | 1-line                  |              |               |               |               |               |               |               |               |               |               |
| Reverse protection    | Yes                     |              |               |               |               |               |               |               |               |               |               |
| Isolation method      | Photoelectric isolation |              |               |               |               |               |               |               |               |               |               |
| Fault diagnosis       | Yes                     |              |               |               |               |               |               |               |               |               |               |
| Typical input current | 3mA                     |              |               |               |               |               |               |               |               |               |               |
| Filting time          | 0.3ms                   |              |               |               |               |               |               |               |               |               |               |
| Precision             | 0.2%                    |              |               |               |               |               |               |               |               |               |               |

| Power Supply Parameters          |                      |                    |
|----------------------------------|----------------------|--------------------|
| Connection type                  | Spring terminals     |                    |
| Working voltage                  | 24V DC -20 % ~ +15 % |                    |
| System feed current              | <1mA                 | <15mA              |
| Maximum area of wire             | 2.0mm <sup>2</sup>   | 1.5mm <sup>2</sup> |
| Maximum area of wire (AWG)       | AWG14                | AWG16              |
| The minimum area of a wire       | 0.2mm <sup>2</sup>   | 0.2mm <sup>2</sup> |
| The minimum area of a wire (AWG) | AWG28                | AWG28              |
| Strip length                     | 6...9mm              | 6...9mm            |

| Digital input module |   |              |               |               |               |               |
|----------------------|---|--------------|---------------|---------------|---------------|---------------|
| Product              | DF20-M-8DI-N  | DF20-M-8DI-P | DF20-M-16DI-N | DF20-M-16DI-P | DF20-M-32DI-N | DF20-M-32DI-P |
| Mechanical Structure | IP20  |              |               |               |               |               |
| Protection grade     | 100mm X 12mm X 69mm                                 |              |               |               |               |               |
| Size(H X W X D)      | 35mm DIN  |              |               |               |               |               |
| Installation type    | 100mm X 24mm X 69mm                                 |              |               |               |               |               |
| Work Environment     | -25... 80°C   |              |               |               |               |               |
| Working temperature  | -40... 85°C   |              |               |               |               |               |
| Storage temperature  | 5... 95%RH(non-condensing)                          |              |               |               |               |               |
| Relative humidity    | Green: The input signal of each channel is working. |              |               |               |               |               |
| LED Status Indicator | Green: The input signal of each channel is working. |              |               |               |               |               |
| Channel Light        | Green: The input signal of each channel is working. |              |               |               |               |               |
| Wiring Diagram       | Green: The input signal of each channel is working. |              |               |               |               |               |

