

Features

- With a power module.
- LED display working status, alarm and bus fault prompt.
- Two PROFINET interface (RJ45, 10/100Mbps).
- With Media Redundancy Protocol.

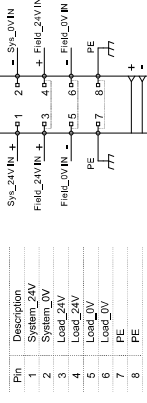


DF20-C-PN-RT-V1

PROFINET 2 RJ45, expandable 32 modules, 24VDC

Specification	
Product	DF20-C-PN-RT-V1
Communication protocol	PROFINET
Transmission rate	10/100Mbps, full duplex
Transmission distance	100 meters
PDO data	1024 bytes
Number of extensible modules	32
Address mapping	Yes
Address setting	PROFINET specification
Transmission medium	Class 5 twisted pair cable
Isolation method	Electrical isolation
Features	RT, conforming to Class C, MRP, automatic addressing/topology detection
Alarm function	Diagnostic Alarm, process alarm, plug and unplug connector alarm
Minimum cycle time	1ms
Power Supply Parameters	
Connection type	Spring terminal blocks
Working voltage	24V DC -20% ~ +15%
Current without load	<50mA
Maximum area of wire	2.5mm ²
Maximum area of wire (AWG)	AWG14
The minimum area of a wire	0.2mm ²
The minimum area of a wire (AWG)	AWG28
Strip length	8...9mm
Supply system voltage	5VDC
Supply system current	Max.0.4A
Supply load voltage	24V...32VDC
Supply load current (MAX)	5A

Product	DF20-C-PN-RT-V1
Mechanical Structure	
Protection grade	IP20
Size(H X W X D)	100mm X 48mm X 68mm
Installation type	35mm DIN
Work Environment	
Working temperature	-25...+80°C
Storage temperature	-40...+85°C
Relative humidity	5...95%RH(non-condensing)
LED Status Indicator	
PWR	Green: Power is working
RUN	Green: I/O system is running
LINK	Blinking green: The module is working
ERR	Red: An error occurred between I/O system and module
LED1	Green: PORT 1 connected successfully.
	Green: Blinking: Port 1 has data communication.
LED2	Green: PORT 2 connected successfully.
	Green: Blinking: Port 2 has data communication.
POWER-1, POWER-2	Green: The system power is working
POWER-3, POWER-4	Green: The load power is working
Wiring Diagram	



DF20-C-PN-RT-V1

Features

- With a power module.
- LED display working status, alarm and bus fault prompt.
- Two EtherCAT interface (RJ45, 100Mbps).



DF20-C-EC

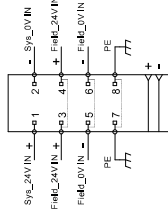
EtherCAT, 2 RJ45, expandable 31 modules, 24VDC

Specification	
Product	DF20-C-EC
Communication protocol	EtherCAT
Connection type	2 X RJ45, with switch function
Transmission rate	10/100Mbps, full duplex
Transmission distance	100 meters
PDO data	1024 bytes
Number of extensible modules	31
Address mapping	Yes
Address setting	EtherCAT specification, DIP switch
Alias range	1-254
Transmission medium	Class 5 twisted pair cable
Isolation method	Electrical isolation
Power Supply Parameters	
Connection type	Spring terminal blocks
Working voltage	24VDC ±0.5%~15%
Current without load	<150mA
Maximum area of wire	2.5mm ²
Maximum area of wire (AWG)	AWG14
The minimum area of a wire	0.2mm ²
The minimum area of a wire (AWG)	AWG28
Strip length	8...9mm
Supply system voltage	5VDC
Supply system current	Max 0.6A
Supply load voltage	24V~32VDC
Supply load current (MAX)	5A

Product	DF20-C-EC
Mechanical Structure	
Protection grade	IP20
Size(H X W X D)	100mm X 48mm X 68mm
Installation type	35mm DIN
Work Environment	
Working temperature	-25...+50°C
Storage temperature	-40...+85°C
Relative humidity	5...95%RH(non-condensing)
LED Status Indicator	
PWR	Green: Power is working
	Green Off: The I/O system is being initialized.
	Green slow blinking: The I/O system is pre-running.
	Green fast blinking: The I/O system is operating safely.
	Green: The I/O system is running.
LINK	Blinking green: The module is working.
ERR	Red: An error occurred between I/O system and module.
LED1	/
LED2	/
POWER-1, POWER-2	Green: The system power is working.
POWER-3, POWER-4	Green: The load power is working.

Wiring Diagram

Pin	Description
1	System_24V
2	System_0V
3	Load_24V
4	Load_24V
5	Load_0V
6	PE
7	PE
8	PE



DF20-C-EC



DF20-C-EN-IP

EtherNET IP, 2 RJ45, expandable 32 modules, 24VDC

Features

- With a power module.
- LED display working status, alarm and bus fault prompt.
- Two EtherNET IP interface (RJ45, 10/100Mbps).

Specification

Product	DF20-C-EN-IP
Communication protocol	EtherNET IP
Transmission rate	10/100Mbps, full duplex
Transmission distance	100 meters
PDO data	1024 bytes
Number of extendable modules	32
Address mapping	Yes
Address setting	EtherNET IP specification, DIP switch
Transmission medium	Class 5 twisted pair cable
Indication method	Electrical indication
Alarm function	Diagnostic alarm, process alarm, plug and unplug connector alarm
Minimum cycle time	1ms

Power Supply Parameters

Connection type	Spring terminal blocks
Working voltage	24V DC -20% ~ +15%
Current without load	<350mA
Maximum area of wire	2.5mm ²
Maximum area of wire (AWG)	AWG14
The minimum area of a wire	0.2mm ²
The minimum area of a wire (AWG)	AWG28
Strip length	8...9mm
Supply system voltage	5VDC
Supply system current	Max:0.4A
Supply lead voltage	24V...30VDC
Supply lead current (MAX)	5A

Product DF20-C-EN-IP

Mechanical Structure

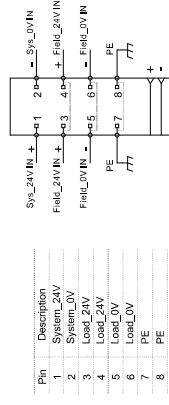
Protection grade	IP20
Size(H X W X D)	100mm X 48mm X 68mm
Installation type	35mm DIN

Work Environment

Working temperature	-25... 80°C
Storage temperature	-40... 85°C
Relative humidity	5... 95%RH(non-condensing)

LED Status Indicator

PWR	Green: Power is working
RUN	Green: IO system is running
LINK	Blinking green: The module is working
ERR	Red: An error occurred between IO system and module
LED1	Green: PORT1 connected successfully, Green-blinking :Port1 has data communication,
LED2	Green: PORT2 connected successfully, Green-blinking :Port2 has data communication,
POWER-1, POWER-2	Green: The system power is working
POWER-3, POWER-8	Green: The load power is working

Wiring Diagram


DF20-C-EN-IP



DF20-C-CC-FB

CC-LINK IE Field Basic, 1 RJ45, expandable 16 modules, 24VDC

Features

- With a power module.
- LED display working status, alarm and bus fault prompt.
- CC-LINK IE Field Basic interface (RJ45, 10/100Mbps).

Specification

Product	DF20-C-CC-FB
Communication protocol	CC-LINK IE Field Basic
Transmission rate	10/100Mbps
Transmission distance	100 meters
PDO data	576 bytes
Number of extensible modules	16
Address mapping	YES
Address setting	CC-LINK IE Field Basic specification, DIP switch
Address range	2-253
Transmission medium	Class 5 twisted pair cable
Isolation method	Electrical isolation

Power Supply Parameters

Connection type	Spring terminal blocks
Working voltage	24V DC-20% -15%
Current without load	<150mA
Maximum area of wire	2.5mm ²
Maximum area of wire (AWG)	AWG14
The minimum area of a wire	0.2mm ²
The minimum area of a wire (AWG)	AWG28
Strip length	8...9mm
Supply system voltage	5VDC
Supply system current	Max.0.6A
Supply load voltage	24V...30VDC
Supply load current (MAX)	5A

Product DF20-C-CC-FB

Mechanical Structure

Protection grade	IP20
Size(H x W x D)	100mm x 48mm x 68mm
Installation type	35mm DIN

Work Environment

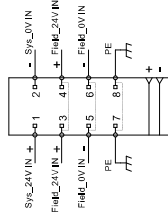
Working temperature	-25...+60°C
Storage temperature	-40...+85°C
Relative humidity	5...95%RH(noncondensing)

LED Status Indicator

PWR	Green: Power is working
RUN	Green: IO system is running
LINK	Blinking green: The module is working
ERR	Red: An error occurred between IO system and module
LED1	/
LED2	/
POWER-1, POWER-2	Green: The system power is working
POWER-7, POWER-8	Green: The load power is working

Wiring Diagram

Pin	Description
1	System_24V
2	System_0V
3	Load_24V
4	Load_24V
5	Load_0V
6	Load_0V
7	PE
8	PE



DF20-C-CC-FB

Features

- With a power module,
- LED display working status, alarm and bus fault prompt.
- Modbus TCP/IP interface (RJ45, 10/100Mbps)



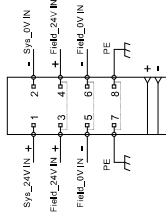
DF20-C-MD-TCP

Modbus TCP/IP, 1 RJ45, expandable 16 modules, 24VDC

Specification	
Product	DF20-C-MD-TCP
Communication protocol	Modbus TCP/IP
Transmission rate	10/100Mbps
Transmission distance	100 meters
PDO data	1024 bytes
Number of extensible modules	16
Support Modbus function	02, 03, 05, 06, 15, 16
Address mapping	yes
Address setting	Modbus TCP/IP specification, DIP switch
Address range	2-253
Transmission medium	Class 5 twisted pair cable
Isolation method	Electrical isolation
Power Supply Parameters	
Connection type	Spring terminal blocks
Working voltage	24V DC ±20% (-15% ~ +10%)
Current without load	<150mA
Maximum area of wire	2.5mm ²
Maximum area of wire (AWG)	AWG14
The minimum area of a wire	0.2mm ²
The minimum area of a wire (AWG)	AWG28
Strip length	8...9mm
Supply system voltage	5VDC
Supply system current	Max.0.4A
Supply lead voltage	24V...32VDC
Supply lead current (MAX)	5A

Product	
Product	DF20-C-MD-TCP
Mechanical Structure	
Protection grade	IP20
Size (H x W x D)	100mm x 48mm x 66mm
Installation type	35mm DIN
Work Environment	
Working temperature	-25...+60°C
Storage temperature	-40...+85°C
Relative humidity	5...95%RH (non-condensing)
LED Status Indicator	
PWR	Green: Power is working
RUN	Green: IO system is running
LINK	Blinking green: The module is working
ERR	Red: An error occurred between IO system and module
LED1	/
LED2	/
POWER-1, POWER-2	Green: The system power is working
POWER-7, POWER-8	Green: The load power is working
Wiring Diagram	

Pin	Description
1	System_24V
2	System_0V
3	Load_24V
4	Load_24V
5	Load_0V
6	Load_0V
7	PE
8	PE



DF20-C-MD-TCP