Autonics

Rising Clamp Interface Terminal Block

AFR Series
CATALOG

For your safety, read and follow the considerations written in the instruction manual, other manuals and Autonics website.

The specifications, dimensions, etc. are subject to change without notice for product improvement. Some models may be discontinued without notice.

Features

- Rising clamp type connection method offers simple, easy and durable connection
- Slim and compact design with 5mm terminal pitch
- Ideal for connector type PLCs and dedicated controller I/O
- DIN rail mount and screw mount methods

Odering Information

This is only for reference, the actual product does not support all combinations.
For selecting the specified model, follow the Autonics website.

| AFR | - | H | ❶ | ❷ | - | ❸ | ❹ |

❶ The number of connector pin
20: 20-pin
26: 26-pin
40: 40-pin
50: 50-pin

❷ Connector
No-mark: HIF3BA, XG4A-2031, XG4A-2631
B: HIF3BB

❸ Indicator
No-mark: no LED
L: LED equipped

❹ Input logic
No-mark: None
N: NPN
P: PNP

Product Components

- Product
- Instruction manual

Specifications

Model	AFR-H20	AFR-H26	AFR-H40	AFR-H50	AFR-H50B
The number of connector pin	20	26	40	50	50
The number of terminal	20	26	40	50	50
Terminal type	Rising Clamp	Rising Clamp	Rising Clamp	Rising Clamp	Rising Clamp
Terminal pitch	5.0 mm	5.0 mm	5.0 mm	5.0 mm	5.0 mm
Connector for controller side	20-pin Omron (XG4A-2031)	26-pin Omron (XG4A-2631)	40-pin Hirose (HIF3BA-40PA-54DSA)	50-pin Hirose (HIF3BA-50PA-2.54DSA)	50-pin Hirose (HIF3BB-50PA-2.54DSA)
Material	Case, Base: PC				
Approval	CE cULus LISTED EAC	CE cULus LISTED EAC	CE cULus LISTED EAC	CE cULus LISTED EAC	CE cULus LISTED EAC
Unit weight (packaged)	≈ 61 g (≈ 98.7 g)	≈ 78 g (≈ 107 g)	≈ 116 g (≈ 183 g)	≈ 143 g (≈ 210 g)	≈ 143 g (≈ 210 g)

Model	AFR-H20-LN, AFR-H20-LP	AFR-H40-LN, AFR-H40-LP
The number of connector pin	20	40
The number of terminal	16 [01]	32 [02]
Terminal type	Rising Clamp	Rising Clamp
Terminal pitch	5.0 mm	5.0 mm
Connector for controller side	20-pin Omron (XG4A-2031)	40-pin Hirose (HIF3BA-40PA-2.54DSA)
Input logic	NPN / PNP model	
Indicator	Power indicator: red, operation indicator: blue	
Material	Case, Base: PC	
Approval	CE cULus LISTED EAC	CE cULus LISTED EAC
Unit weight (packaged)	≈ 61.1 g (≈ 98.8 g)	≈ 118 g (≈ 188 g)

01) Four terminals among twenty terminals are used for LED power.
02) Eight terminals among fourty terminals are used for LED power or N.C (Not Connectred) terminals.

Rated voltage [01]	Basic model: ≤ 125 VDC⎓, 125 VAC∼ 50/60 Hz Indicator equipped model: ≤ 24 VDC⎓ ± 10%
Rated current	≤ 1 A
Insulation resistance	≥ 1,000 MΩ (500 VDC⎓ megger)
Dielectric strength	2,700 VAC∼ 50/60 Hz for 1 minute
Vibration	0.75 mm amplitude at frequency of 10 to 55 Hz (for 1 minute) in each X, Y, Z direction for 2 hours
Vibration (malfunction)	0.75 mm amplitude at frequency of 10 to 55 Hz (for 1 minute) in each X, Y, Z direction for 10 minutes
Shock	150 m/s² (≈ 15 G) in each X, Y, Z direction for 3 times
Shock (malfunction)	100 m/s² (≈ 10 G) in each X, Y, Z direction for 3 times
Ambient temperature	-15 to 55 °C, storage: -25 to 65 °C (no freezing or condensation)
Ambient humidity	35 to 85 %RH, storage: 35 to 85 %RH (no freezing or condensation)
Protection structure	IP20 (IEC standard)

01) When connecting loads to output part, connect loads of same power type. Connecting loads of different power type may cause safety issues.
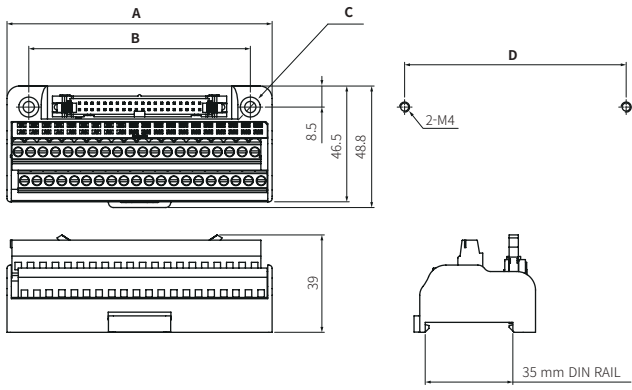
Applicable wire - solid [01]	Ø 0.3 to 1.2 mm
Applicable wire - stranded [01] [02]	AWG 22-16 (0.30 to 1.25 mm²)
Wire ferrule connection tensile strength	≥ 30 N
Stripped length	6 to 8 mm

01) Use the cable of copper conductor in 60 °C temperature class.
02) When using the stranded wire, use End Sleeve (wire ferrule).

Dimensions

• Unit: mm, For the detailed dimensions of the product, follow the Autonics web site.

	A	B	C	D
20-pin	57.5	53	2-Ø4.2	53
26-pin	72.5	64	2-Ø4.2	64
40-pin	106.5	89	2-Ø4.5	89
50-pin	131.5	102	2-Ø4.5	102

Sold Separately

• I/O cable