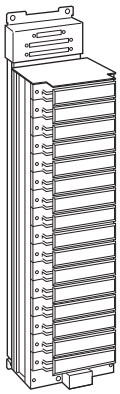
Rack-mounted DCS Signal Conditioners 18-RACK

STANDARD RACK

(pressure supply)

Functions & Features

- Vertical rack for 18-RACK signal conditioners
- Line power supplied via the rear rack bus
- Supply pressure at manifold plug
- Direct interface to various DCS with the rack connector



MODEL: 18BXA–[1]

ORDERING INFORMATION

- Code number: 18BXA-[1]

Specify a code from below for [1]
(e.g. 18BXA-ENC)

[1] CONNECTOR

FCN: Fujitsu FCN type I/O connector
ENC: Yokogawa DCS VM type card use
ENM: Yokogawa DCS MAC2 type card use
M-System guarantees the connecting section.

RELATED PRODUCTS

- Blank filler plate (model: P-181)
- Connector terminal block (model: CNT)
- Special cable with 40-pin connector (model: FCN)

GENERAL SPECIFICATIONS

Construction: Metal plates assembly; power terminal cover provided
Coating: Colored Zn-Cr
Capacity: 16 positions
Connection
Power input: M4 screw terminals (torque 0.8 N·m)
(For 18BXA-ENC and 18BXA-ENM, power plug attached to power input terminals.)
Pneumatic: Rc 3/8" female (torque ≤ 12 N·m)
Screw terminal: Nickel-plated brass
Manifold: Aluminium alloy

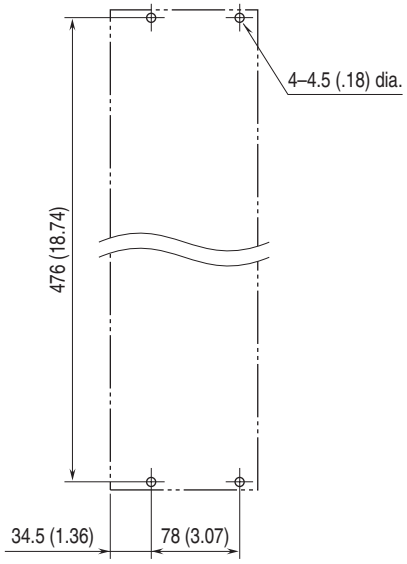
INSTALLATION

Power input
•**DC**: 24 V DC ±10 %, (ripple 10 % p-p max.)
Operating temperature: -5 to +55°C (23 to 131°F)
Operating humidity: 30 to 90 %RH (non-condensing)
Mounting: Angle bracket
Weight: 3 kg (6.61 lbs)

PERFORMANCE

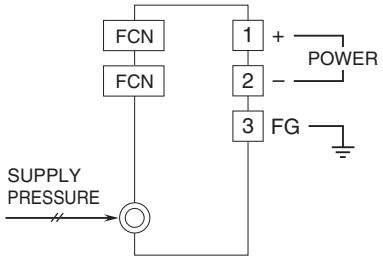
Insulation resistance: ≥ 100 MΩ with 500 V DC
(I/O connector to power to FG)
Dielectric strength: 500 V AC @ 1 minute
(I/O connector to power to FG)
Maximum supply pressure: 196 kPa
(2 kgf/cm^2, 1.96 bar, 28 psig)

MOUNTING REQUIREMENTS

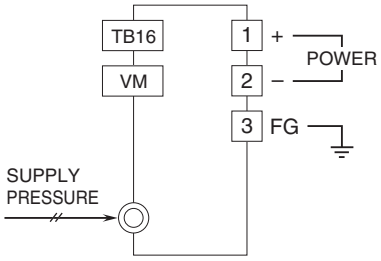


CONNECTION DIAGRAM

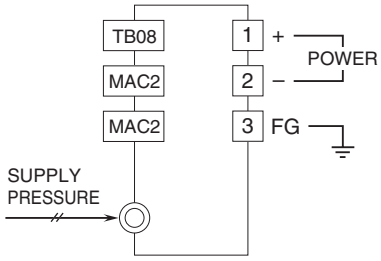
■ **FCN**



■ **VM**

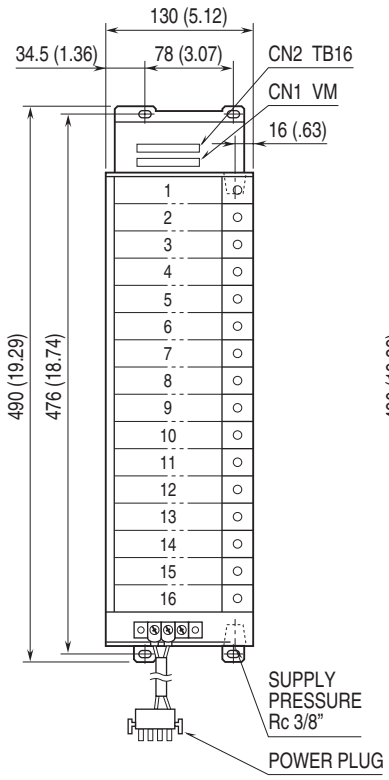


■ **MAC2**

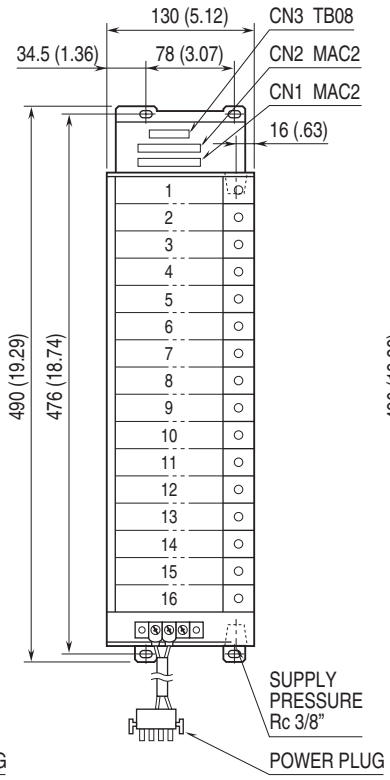


DIMENSIONS unit: mm (inch)

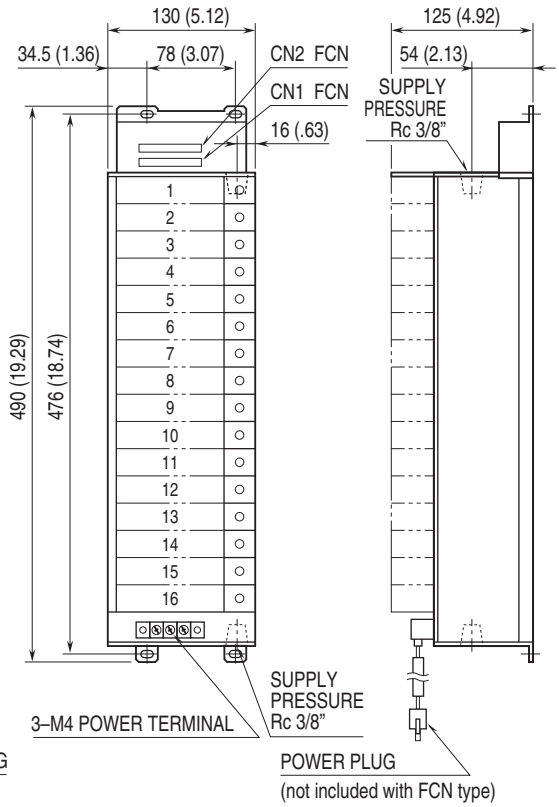
■ VM CONNECTOR



■ MAC2 CONNECTOR



■ FCN CONNECTOR



I/O CONNECTOR PIN ASSIGNMENT

• Fujitsu FCN type I/O connector

(Fujitsu FCN-364P040-AU)

Connector Pin Assignment

CN1: output 1 or input

CN2: output 2

PIN NO.	ASSIGNMENT	PIN NO.	ASSIGNMENT
A 1	ch. 1 +	B 1	ch. 1 –
A 2	ch. 2 +	B 2	ch. 2 –
A 3	ch. 3 +	B 3	ch. 3 –
A 4	ch. 4 +	B 4	ch. 4 –
A 5	ch. 5 +	B 5	ch. 5 –
A 6	ch. 6 +	B 6	ch. 6 –
A 7	ch. 7 +	B 7	ch. 7 –
A 8	ch. 8 +	B 8	ch. 8 –
A 9	ch. 9 +	B 9	ch. 9 –
A10	ch.10 +	B10	ch.10 –
A11	ch.11 +	B11	ch.11 –
A12	ch.12 +	B12	ch.12 –
A13	ch.13 +	B13	ch.13 –
A14	ch.14 +	B14	ch.14 –
A15	ch.15 +	B15	ch.15 –
A16	ch.16 +	B16	ch.16 –

A17 – A20, B17 – B20: Unused

Pin assignment is common to both CN1 and CN2.

• Yokogawa DCS connector

(PS-40PE-D4T1-PN1)

Location

CN1: VM card use (output 1 or input)

CN2: TB16 connector (output 2)

18-RACK LOCATION NO.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 VM1/VM4 CARD INPUT or OUTPUT CN1
1 2 3 4 5 6 7 8 | 1 2 3 4 5 6 7 8 VM2 CARD INPUT NO. CN1 | VM2 CARD OUTPUT NO. CN1
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 TB16 CARD POINT NO. CN2

• Yokogawa DCS connector

(MAC2 use: PS-40PE-D4T1-PN1)

(TB08 use: PS-20PE-D4T1-PN1)

Location

CN1, CN2: MAC2 card use (output 1 or input)

CN3: TB08 connector (output 2)

18-RACK LOCATION NO.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
1 1 2 2 3 3 4 4 5 5 6 6 7 7 8 8 i o i o i o i o i o i o i o i o i o MAC2 CARD I/O (i = input, o = output) CN1, CN2
1 2 3 4 5 6 7 8 TB08 CARD POINT NO. CN3

⚠ Specifications are subject to change without notice.