

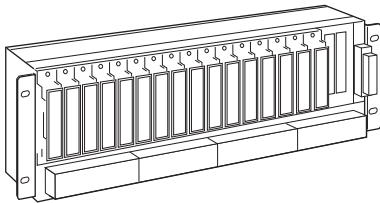
Rack-mounted DCS Signal Conditioners 18K-RACK

STANDARD RACK

(pressure supply)

Functions & Features

- Standard 19" rack for 18K-RACK signal conditioners and I/P transducer (model: 18VP)
- Other 18-Rack signal conditioners are also mountable
- Module can be retracted without removing wiring for an insulation test
- Line power supplied via the rear rack bus
- Supply pressure at the manifold plug
- Direct interface to various DCS with the rack side connector



MODEL: 18KBXCA-[1][2]

ORDERING INFORMATION

- Code number: 18KBXCA-[1][2]

Specify a code from below for each of [1] and [2].
(e.g. 18KBXCA-Y1/W)

[1] CONNECTOR

0: None

U1: Fujitsu FCN type I/O connector

Y1: Yokogawa DCS MAC2 / PAC card use

Y2: Yokogawa DCS VMx / PM1 card use

E4: Toshiba DCS VTBU card use

We guarantee the connecting section.

[2] OPTIONS

Mounting Bracket

blank: Rack mounting, standard

/W: Surface mounting

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

Coating: Colored Zn-Cr

Capacity: 16 positions

Connection

Power input: M4 screw terminals (torque 0.8 N·m)

Field terminal: M3.5 screw terminals (torque 0.8 N·m)

Pneumatic: Rc 3/8" female (torque ≤ 12 N·m)

Screw terminal

Power: Nickel-plated brass

Field terminal: Nickel-plated steel

Manifold: Aluminium alloy

Isolation: I/O connector to field terminal to power to FG

INSTALLATION

Supply pressure: Refer to the data sheet for I/P transducers

Power input

- **DC:** Operating voltage range 24 V DC ± 10 %, 2.5 A minimum (ripple 10 % p-p max.)

Operating temperature: -5 to +55°C (23 to 131°F)

Operating humidity: 30 to 90 %RH (non-condensing)

Mounting: JIS or EIA standard rack or surface

Weight: 6 kg (13.2 lb)

PERFORMANCE

Insulation resistance: ≥ 100 M Ω with 500 V DC

Dielectric strength: 500 V AC @ 1 minute

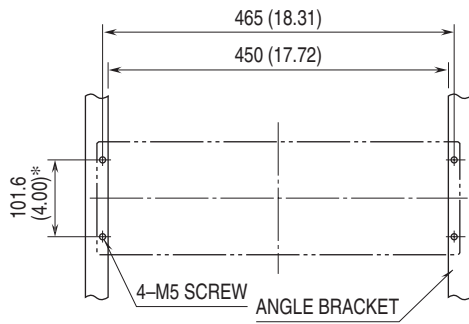
(I/O connector to field terminal to power)

1000 V AC @ 1 minute (I/O connector or field terminal or power to FG)

Maximum supply pressure: 196 kPa

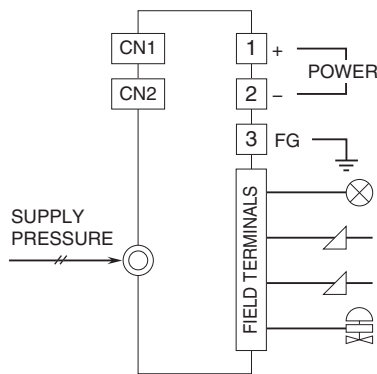
(2 kgf/cm², 1.96 bar, 28 psig)

MOUNTING REQUIREMENTS unit: mm (inch)



Observe an appropriate wiring space over and below.
 *100 (3.94) for JIS standard

CONNECTION DIAGRAM



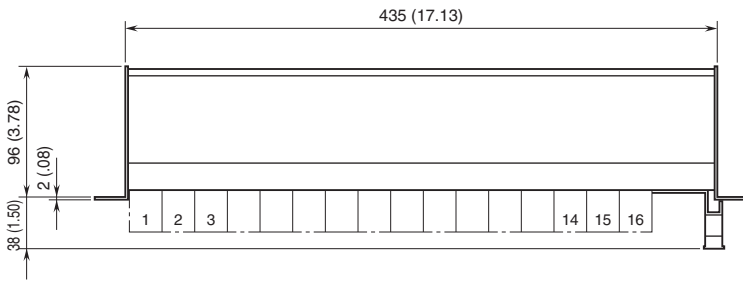
Note 1: CN1 and CN2 are not available without connector.

Note 2: CN2 is only available with

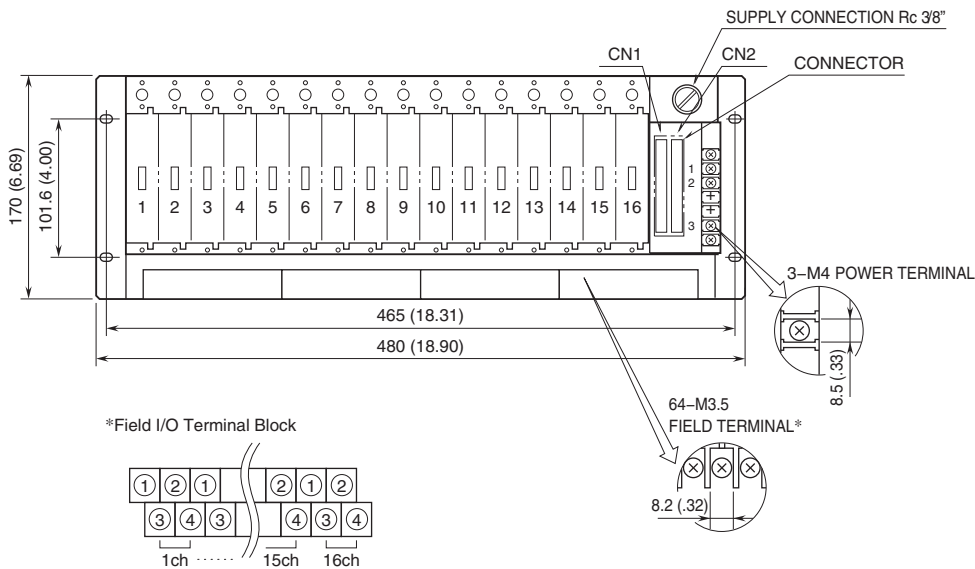
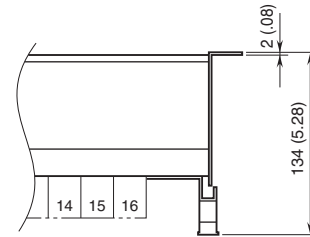
- Fujitsu FCN type I/O connector
- Yokogawa DCS MAC2 / PAC card use

DIMENSIONS unit: mm (inch)

■ RACK (standard)



■ SURFACE (option /W)



I/O CONNECTOR PIN ASSIGNMENT

•Fujitsu FCN type I/O connector

(OTAX N365P040AU
(Fujitsu FCN-365P040-AU...discontinued))

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 MAC2 / PAC card use

(PS-40PE-D4LT1-PN1)

Location

CN1: MAC2 / PAC card use*

CN2: MAC2 / PAC card use* (for redundancy)

The input or output 1 is connected to the connector.

18K-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
MAC2/PAC CARD I/O (i = input, o = output)															

*MAC2 card (uses KS1 cable)

I/O card used for control I/O. Composed of 8 inputs and 8 outputs. Input and output are paired. (Replace with pulse inputs for PAC card.)

• **Yokogawa DCS VMx / PM1 card use**
(PS-40PE-D4LT1-PN1)

Location

CN1: VMx / PM1 card use*

The input or output 1 is connected to the connector.

18K-RACK LOCATION NO.															
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
VM1/PM1/VM4 CARD INPUT or OUTPUT															
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
VM2 CARD INPUT NO.								VM2 CARD OUTPUT NO.							
1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8

*VMx / PM1 card (uses KS2 cable)

VM1: analog input 16 points

VM2: analog input 8 points / analog output 8 points

VM4: analog output 16 points

PM1: pulse input 16 points

• **Toshiba DCS VTBU card use** (57LE-40360-7700)

Connector Pin Assignment

CN1: VTBU card use

The output 1 is connected to the connector.

PIN NO.	ASSIGNMENT	PIN NO.	ASSIGNMENT
1	ch. 1 +	19	ch. 1 -
2	ch. 2 +	20	ch. 2 -
3	ch. 3 +	21	ch. 3 -
4	ch. 4 +	22	ch. 4 -
5	ch. 5 +	23	ch. 5 -
6	ch. 6 +	24	ch. 6 -
7	ch. 7 +	25	ch. 7 -
8	ch. 8 +	26	ch. 8 -
9	ch. 9 +	27	ch. 9 -
10	ch.10 +	28	ch.10 -
11	ch.11 +	29	ch.11 -
12	ch.12 +	30	ch.12 -
13	ch.13 +	31	ch.13 -
14	ch.14 +	32	ch.14 -
15	ch.15 +	33	ch.15 -
16	ch.16 +	34	ch.16 -

17, 18, 35 and 36: Unused



Specifications are subject to change without notice.