MODEL: 18KBXH

Rack-mounted DCS Signal Conditioners 18K-RACK

STANDARD RACK

Functions & Features

- Housing for storage of Rack-mounted DCS Signal Conditioners 18K-RACK
- Integrated rack and field terminals allow for signal conditioners to be removed without touching the terminal screws, making field wiring insulation tests possible
- Signal conditioner power via the rear rack bus for all 8 modules
- Connectors are available for direct connection to DCS units of various manufacturers
- Mounting bracket position selectable



MODEL: 18KBXH-[1][2]

ORDERING INFORMATION

Code number: 18KBXH-[1][2]
 Specify a code from below for each of [1] and [2].
 (e.g. 18KBXH-E1/W)

[1] CONNECTOR

0: None

U1: Fujitsu FCN type I/O connector **E1**: For Toshiba DCS SAMP1 card use

E3: For Toshiba DCS SAIN1, SAI06 and SAO06 card use

(Panasonic AXM220011 used)

(DISCONTINUED; replace with code "E3A".)

E3A: Toshiba DCS SAIN1, SAI06, SA006 card supported

(Omron XG4A-2034 used)

E4: For Toshiba DCS SAIN1 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**: 8 positions

Connection

Power input: M4 screw terminals (torque 0.8 N·m) **Field terminal**: M3.5 screw terminals (torque 0.8 N·m)

Screw terminal

Power: Nickel-plated brass **Field terminal**: Nickel-plated steel

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

INSTALLATION

Power supply: Operational voltage range: 24 V DC ±10%

Ripple 10 % p-p max. $@ \ge 1.3 \text{ A}$

Operating temperature: -5 to +55°C (23 to 131°F)
Operating humidity: 30 to 90 %RH (non-condensing)

Mounting: Rack or Surface **Weight**: 1.8 kg (4.0 lb)

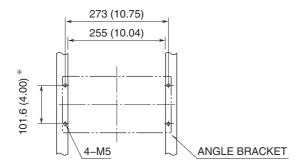
PERFORMANCE

Insulation resistance: $\geq 100~M\Omega$ 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)

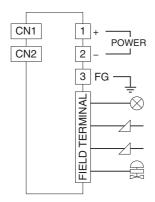
MOUNTING REQUIREMENTS unit: mm (inch)



Note: Leave an appropriate amount of space above/below the rack for wiring.

*100 (3.94) for JIS standard

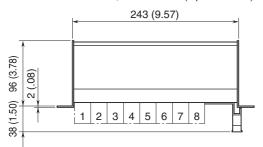
CONNECTION DIAGRAM



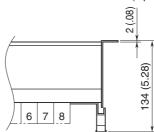
Note: CN1 and CN2 are not provided without connector.

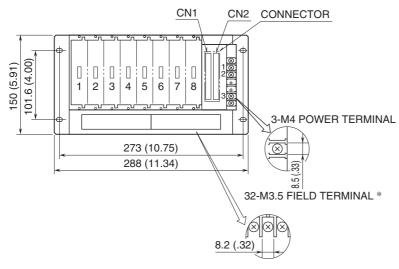
DIMENSIONS unit: mm (inch)

■ RACK MOUNTING, STANDARD (Option: blank)

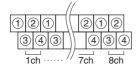


■ SURFACE MOUNTING (Option: /W)





* Field I/O Terminal Block



I/O CONNECTOR PIN ASSIGNMENT

■ FUJITSU FCN TYPE I/O CONNECTOR

• Connector Pin Assignment I/O Connector: OTAX N365P040AU

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

CN1: Output 1 or input CN2: Output 2

CNZ. Output Z				
PIN NO.	ASSIGNMENT	PIN NO.	ASSIGNMENT	
A1	ch.1 +	B1	ch.1 -	
A2	ch.2 +	B2	ch.2 -	
A3	ch.3 +	B3	ch.3 -	
A4	ch.4 +	B4	ch.4 -	
A5	ch.5 +	B5	ch.5 -	
A6	ch.6 +	B6	ch.6 -	
A7	ch.7 +	B7	ch.7 –	
A8	ch.8 +	B8	ch.8 -	

A9 - A20, B9 - B20 are not in use
Pin assignment is common to both CN1 and CN2

■ FOR TOSHIBA SAMP1 CARD USE

Location

Output Connector: Hirose Electric HIF3BA-40PA-2.54DS (11)

CN1: For SAMP1

CN2: For SAMP1 (for redundancy)

18K-RACK Location No.							
1	2	3	4	5	6	7	8
CN1, CN2							
1	2	3	4	5	6	7	8
SAMP1 Input No.							

■ FOR TOSHIBA DCS SAIN1, SAI06 AND SAO06 CARD USE

Location

I/O Connector: Omron XG4A-2034

CN1: SAIN1, SAI06, SAO06 (ch.1 - ch.8)

CN2: SAIN1, SAI06, SAO06 (ch.1 - ch.8) (for redundancy)

	18K-RACK Location No.							
1	2	3	4	5	6	7	8	
	CN1, CN2							
1	2	3	4	5	6	7	8	
SAIN1, SAI06, SAO06 I/O No.								

• Connector Pin Assignment

- Connector in Assignment				
PIN NO.	ASSIGNMENT			
20	ch.1 +			
19	ch.1 –			
18	ch.2 +			
17	ch.2 –			
16	ch.3 +			
15	ch.3 -			
14	ch.4 +			
13	ch.4 -			
12	ch.5 +			
11	ch.5 -			
10	ch.6 +			
9	ch.6 -			
8	ch.7 +			
7	ch.7 -			
6	ch.8 +			
5	ch.8 -			

Pin assignment is common to both CN1 and CN2

The signal that is connected to the connector is the input signal or the output signal 1.

Toshiba DCS SAMP1 uses Panasonic AXM220001. As connector is discontinued, Omron XG4A-2034 is used as an alternative. (Replace cable side.)

■ TOSHIBA DCS SAIN1 CARD USE

Location

Output Connector: Hirose Electric HIF3BA-20PA-2.54DS (11)

CN1: SAIN1 (ch.1 - ch.8)

CN2: SAIN1 (ch.1 - ch.8) (for redundancy)

	•		, ,		• ,		
	18K-RACK Location No.						
1	2	3	4	5	6	7	8
CN1, CN2							
1	2	3	4	5	6	7	8
SAIN1 I/O No.							

• Connector Pin Assignment

_	
PIN NO.	ASSIGNMENT
20	ch.1 +
19	ch.1 –
18	ch.2 +
17	ch.2 –
16	ch.3 +
15	ch.3 –
14	ch.4 +
13	ch.4 –
12	ch.5 +
11	ch.5 –
10	ch.6 +
9	ch.6 –
8	ch.7 +
7	ch.7 –
6	ch.8 +
5	ch.8 –

Pin assignment is common to both CN1 and CN2

The signal that is connected to the connector is the input signal or the output signal ${\bf 1}$.

Specifications are subject to change without notice.