General Specifications

Model DCE
Nest for I/O cards

JUXTA

GS 77J05Y51-01E

■ General

The DCE is a connecter-connection type 16-unit mounting nest. It is available for mixed mounting of electronic and pneumatic signal conditioners, and connection with DCS I/O modules for CENTUM series of Yokogawa Electric Corporation.

- Ranges and parameters can be set using DSC2 or the JHT200, Yokogawa handy terminal. (The availability depends on the model of signal conditioners.)

■ Model and Suffix Codes

DCE-3□*A/□

Model

Power supply
3 : 24 V DC±10%

Communication function
0 : None
2 : Available (with DSC2 card)

Optional specification
AS : Card embedded type

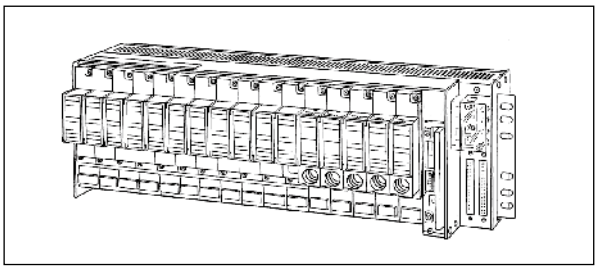
■ Ordering Information

Specify the following when ordering.

- Model and suffix codes: e.g. DCE-32*A

■ Standard Performance

Insulation resistance: 100 MΩ or more at 500 V DC between input and power supply, input and ground, input and CN1-CN2, power supply and ground, power supply and CN1-CN2, and ground and CN1-CN2.



Withstand voltage: 1500 V AC/min. between input and (power supply and ground and CN1-CN2).
500 V AC/min. between power supply and ground, ground and CN1-CN2, and power supply and CN1-CN2.
Operating temperature range: 0 to 50°C
Operating humidity range: 5 to 90% RH (no condensation)

■ Mounting and Dimensions

Connection cable: KS2 (CN1, CN2)
I/O signal connection: M4 screw terminals
Power supply and ground connection: M4 screws terminals
I/O cable shield connection: M3 screw terminal
Mounting method: Rack or Wall mounting (horizontal mounting)
Nest mounting screw: M5 screws
Color: Black
Weight: Approx. 3.8 kg

■ Standard Accessories

Plate: Installed on the empty slot when shipping
Mounting bracket: 1 pair
Tag number label: 16

■ DCS Connection Modules and Signal Conditioners

Modules connectable with CN1			Equipments connectable with CN2	Signal conditioners mountable for each slot	
				Slot	Models
Analog input: 16 points		AAV141/K4A00 (*1) AMM12C (*2) VM1 (*3)	Indicators, recorders, and alarm setters etc. through terminal blocks.	1 to 16	DA1, DA2, DA5, DH1, DH2, DH5, DM1, DT5, DR5, DRU, DS1, DP3, DF1, DB1, DG1, DD1, DSK (Note1), DX1
Analog I/O: 16 points	Input: 8 points	AAB841/V4A00 (*1) VM2 (*3)	Indicators, recorders, and alarm setters etc. through terminal blocks.	1 to 8	DA1, DA2, DA5, DH1, DH2, DH5, DM1, DT5, DR5, DRU, DS1, DP3, DF1, DB1, DG1, DD1, DSK (Note1), DX1
	Output: 8 points		———	9 to 16	DA0, DH0, DQ0, DSK (Note1), DX1 (Note2)
Analog output: 16 points		AAV542/K4A00 (*1) VM4 (*3)	———	1 to 16	DA0, DH0, DQ0, DSK (Note1), DX1 (Note2)
Pulse train input: 16 points		AAP149 (*1) PM1 (*3)	Pulse counters etc. through terminal blocks.	1 to 16	DP1, DSK (Note1), DX1 (Note2)

*1: FIO module of CENTUM CS3000, *2: RIO module of CENTUM CS3000/CS1000, *3: I/O card of CENTUM XL/XL/V
Note1: DSK is not connectable to DCS. DSK mounted to the slot can not send or receive signals through CN1/CN2.
Note2: DX1-21N*A and DX1-31N*A (when 250Ω is selected) can not be mounted to this nest.

YOKOGAWA

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GS 77J05Y52-01E

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■ Assignment of Input/Output Terminals

I/O screw terminal: M4 x 0.7, I/O signal piping: Rc1/4 female screw

Signal Conditioners		Field side I/O terminal A	B	C	Front terminal of the signal conditioner 1	2	3	4	AIR
DM1		+		–			+	–	
							For Output 2		
DT5		+ RJC –					+	–	
							For Output 2		
DR5		Wiring resistance of A and B should be equal					+	–	
							For Output 2		
DRU		RTD					+	–	
							For Output 2		
DS1		100% CENTER 0% Wiring resistance of A and C should be equal					+	–	
							For Output 2		
DP1 DP3	2-wire type (Voltage contact)	+		–					
	Internal power supply 2-wire type	Signal	Power supply				+	–	
							For Output 2		
	Internal power supply 3-wire type	+	Power supply	–					
DH1, DH2, DH5		+		–			+	–	
							For Output 2		
DA1, DA2, DA5		Available for the combination with BARD For 2-wire transmitter In case power supply is not necessary					+	–	
							For Output 2		
DH0, DA0, DQ0		+		–					
DX1		+		–					
DG1					V u v ± U V L N		+	–	
							For Output 2		
DB1					A k l ± K L		+	–	
							For Output 2		
DD1					V TG ±		+	–	
							For Output 2		
DF1					+	–			IN
					For Output 2				
DSK		+		–	NO/NC	COM	NO/NC	COM	
					Output 1		Output 2		

• In case the Output 2 signal is DC current, it can be outputted from either “CN2” or “front terminals of the signal conditioner”.

System side connecting cable

Connector No.	Signal	Cable model
CN1	System side connection signal	KS2
CN2	Output 2 connection signal	KS2

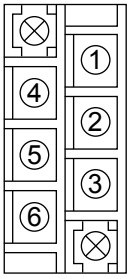
CN1/CN2

40	39
38	37
36	35
34	33
32	31
30	29
28	27
26	25
24	23
22	21
20	19
18	17
16	15
14	13
12	11
10	09
08	07
06	05
04	03
02	01

CN1/CN2 connector pin assignment

CN1/CN2 Pin No.	Slot No.		CN1/CN2 Pin No.	Slot No.	
40 39	1	+ –	20 19	11	+ –
38 37	2	+ –	18 17	12	+ –
36 35	3	+ –	16 15	13	+ –
34 33	4	+ –	14 13	14	+ –
32 31	5	+ –	12 11	15	+ –
30 29	6	+ –	10 09	16	+ –
28 27	7	+ –	08 07		
26 25	8	+ –	06 05		
24 23	9	+ –	04 03		
22 21	10	+ –	02 01		

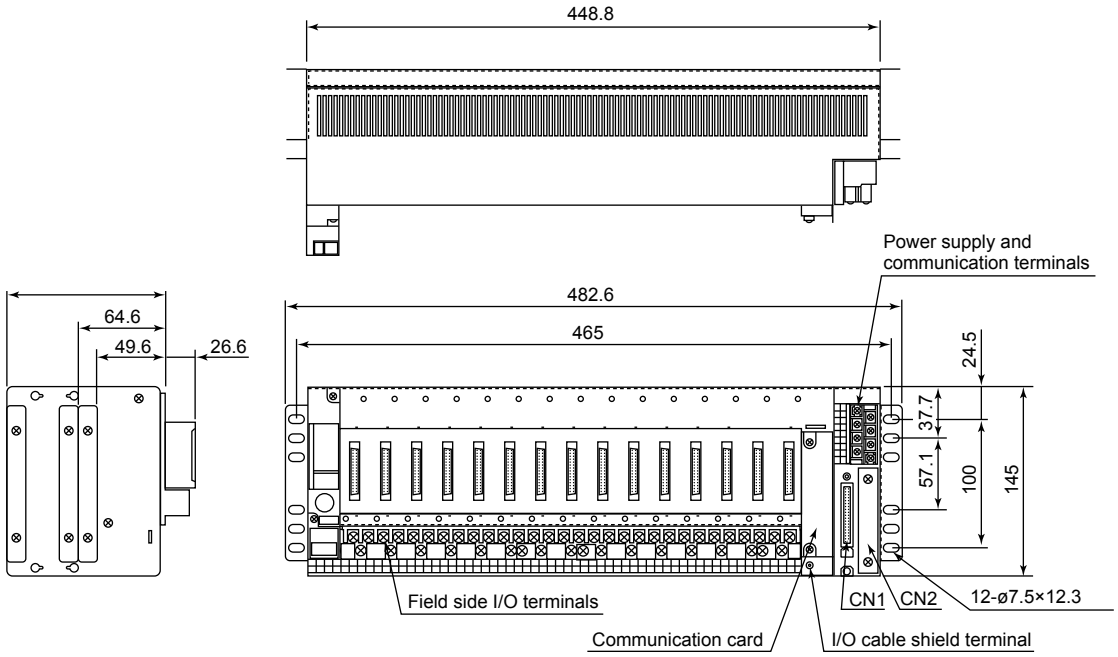
■ Assignment of Power Supply and Communication Terminals



Terminal number	DCE-30*A		DCE-32*A	
1	+	24 V DC	+	24 V DC
2	–		–	
3	GND		GND	
4			A(–)	RS-485
5			B(+)	
6			SG	

■ External Dimensions

Unit: mm



Note A mounting method is limited to horizontal installation in 19 inch rack of the EIA/JIS-standard.