

General Specifications

Model DCE
Nest for I/O cards



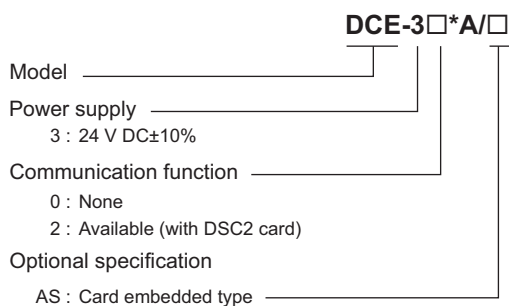
GS 77J05Y51-01E

General

The DCE is a connector-connection type 16-unit mounting nest. It is available for connection with DCS I/O modules for the 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



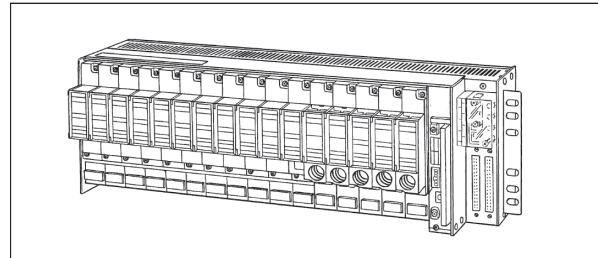
Ordering Information

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) AAB141/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, DA7 (Note3)
Analog I/O: 16 points	Input: 8 points	AAB841/V4A00 (*1) AAB842/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, DA7 (Note3)
	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 VP/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.

Note3: Only the AAB141/K4A00 and AAB842/V4A00 modules can be connected to this nest.

■ 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			Front terminal of the signal conditioner				AIR	
	A	B	C	1	2	3	4		
DM1	+	Not Connected	-	Not Connected	Not Connected	+	-		
DT5				Not Connected	Not Connected	For Output 2			
DR5				Not Connected	Not Connected	For Output 2			
DRU				Not Connected	Not Connected	For Output 2			
DS1				Not Connected	Not Connected	For Output 2			
DP1 DP3	2-wire type (Voltage contact)	+	Not Connected	-	Not Connected	Not Connected	Not Connected		
	Internal power supply 2-wire type	Signal	Power supply	Not Connected	Not Connected	Not Connected	For Output 2		
	Internal power supply 3-wire type	+	Power supply	-	Not Connected	Not Connected	Not Connected		
DH1, DH2, DH5	+	Not Connected	-	Not Connected	Not Connected	For Output 2			
DA1, DA2, DA5	Available for the combination with BARD 			Not Connected	Not Connected	For Output 2			
DA7	In case power supply is not necessary 			Not Connected	Not Connected	Not Connected			
DH0, DA0, DQ0	+	Not Connected	-	Not Connected	Not Connected	Not Connected			
DX1	+	Not Connected	-	Not Connected	Not Connected	Not Connected			
DG1	Not Connected	Not Connected	Not Connected			+	-		
DB1	Not Connected	Not Connected	Not Connected			+	-		
DD1	Not Connected	Not Connected	Not Connected			+	-		
DF1	Not Connected	Not Connected	Not Connected	+	-	Not Connected			
DSK				For Output 2		Not Connected		IN	
	+	Not Connected	-	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

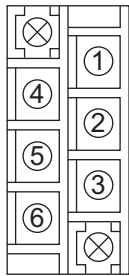
40	39
38	37
36	35
34	33
32	31
30	29
28	27
26	25
24	23
22	21
20	19
18	17
16	15
14	13
12	11
10	09
08	07
06	05
04	03
02	01

CN1/CN2 connector pin assignment

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

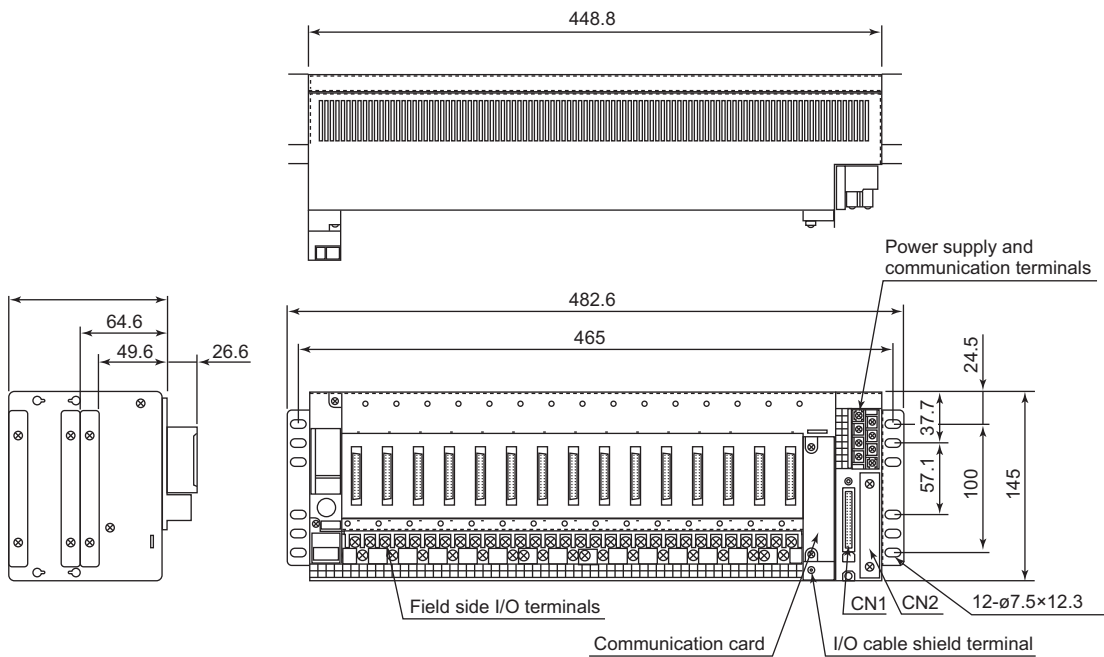
■ Assignment of Power Supply and Communication Terminals

Terminal number	DCE-30*A		DCE-32*A	
	1	+	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.