

General Specifications

Model DCE
Nest for I/O cards

JUXTA

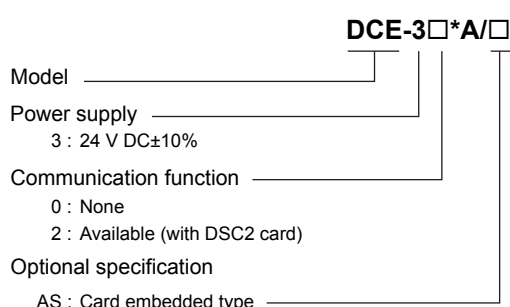
GS 77J05Y51-01E

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 VJ77 Parameters Setting Tool. (The availability depends on the model of signal conditioners.)

Model and Suffix Codes



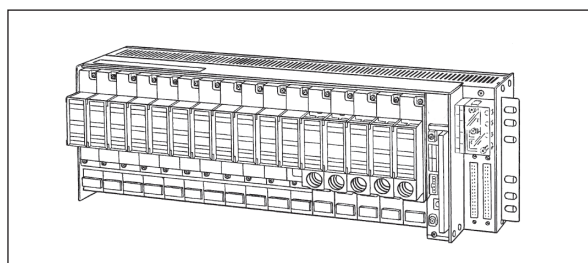
Ordering Information

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		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		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		_____	1 to 16	DA0, DH0, DQ0, DSK (Note1), DX1 (Note2)
Pulse train input: 16 points		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					
		A	B	C	1	2	3	4	AIR	
DM1		+	Not Connected	—	Not Connected	Not Connected	+	—		
DT5					Not Connected	Not Connected	+	—		
DR5					Not Connected	Not Connected	+	—		
		Wiring resistance of A and B should be equal					For Output 2			
DRU							+	—		
							For Output 2			
DS1					Not Connected	Not Connected	+	—		
		Wiring resistance of A and C should be equal					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			+	—		
	Internal power supply 3-wire type	+	Power supply	—			For Output 2			
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	+	—		
DA7		For 2-wire transmitter In case power supply is not necessary					For Output 2			
							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			+	—		
							For Output 2			
DB1		Not Connected	Not Connected	Not Connected			+	—		
							For Output 2			
DD1		Not Connected	Not Connected	Not Connected			+	—		
							For Output 2			
DF1		Not Connected	Not Connected	Not Connected	+	—	Not Connected			
					For Output 2					
DSK		+	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

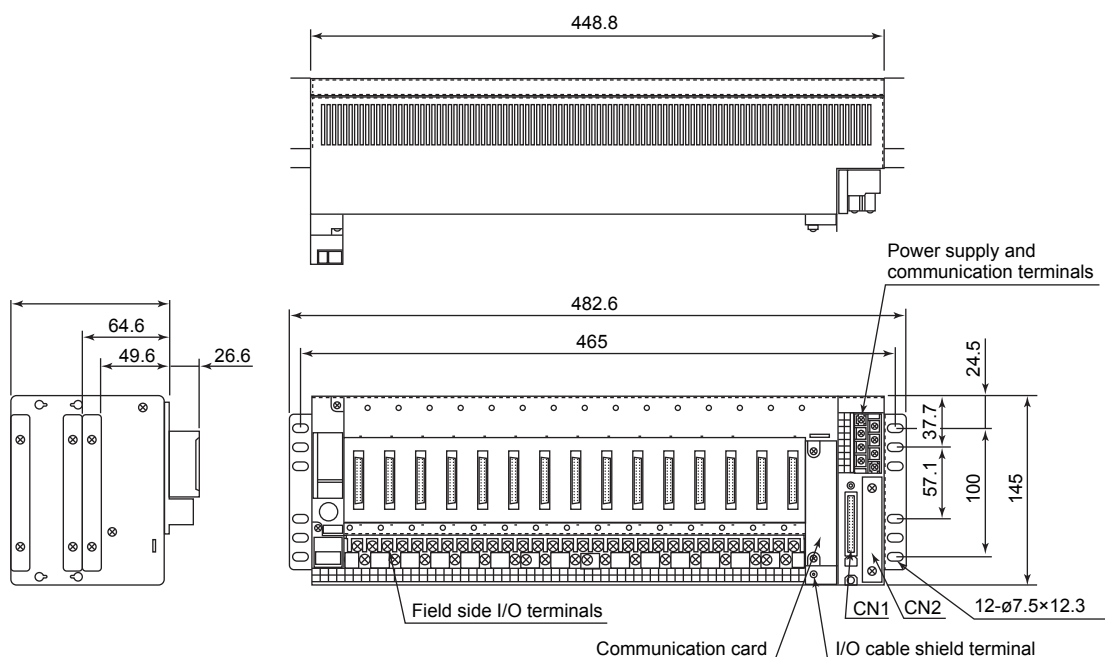
CN1/CN2 Pin No.	Slot No.	CN1/CN2 Pin No.	Slot No.
40	1	+	20
39	1	—	19
38	2	+	18
37	2	—	17
36	3	+	16
35	3	—	15
34	4	+	14
33	4	—	13
32	5	+	12
31	5	—	11
30	6	+	10
29	6	—	09
28	7	+	08
27	7	—	07
26	8	+	06
25	8	—	05
24	9	+	04
23	9	—	03
22	10	+	02
21	10	—	01

■ 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.

■ Basic Conditions and Individual Contracts at the Time of Purchase

The warranty for this product is defined in the basic conditions and individual contracts at the time of purchase. The individual conditions are as follows.

• Handling of non-conforming products

If Yokogawa verifies a non-conformity of the product that is attributable to Yokogawa within the warranty period, we will deliver an equivalent product.

Yokogawa can not provide a free evaluation of non-conforming products. The investigation of the non-conforming products will be performed at the expense of the customer.