SIEMENS

Data sheet

6ES7924-0CH20-0BC0



20 00000

CONNECT. MOD. TP3 SEPARAT. LED PUSH-IN

Connection module TP3 with isolating terminal per channel 8 channels and 2x10 terminals for Potential supply Type: Push-in terminal with LED, VPE=1 unit 16 pole IDC connector f. cable

suitability for use Digital I/O modules product type designation Fully modular connection product designation Connection module	target system	SIMATIC S7-300 / 1500
product designation connection module control data operating voltage	suitability for use	Digital I/O modules
operating voltage at DC / rated value at DC / maximum ampacity / per pin / maximum continuous current / at DC / per signal cable / maximum 1 A total current / maximum a sa status display of the inputs/outputs in or power supply / power LED roduct function / infeed function product component in PE connection indicated on each of the minutal subsets of the electrical connection of the reminal push-in position / of the terminal terminal levels internaley linked design of the minutal subsets of the electrical connection vier length / maximum 30 m; between front connector module and Connection module vier length / maximum 30 m; between front connector module and Connection module vier length / maximum in of fersible conductor / with core end processing in finely stranded / without core end processing estatuach in off processing of stranded in of yes and of the conductor or see sections / solid of subsequence or	product type designation	Fully modular connection
operating voltage • at DC / rated value • rated value • at DC / maximum 28.8 V ampacity / per pin / maximum 1 A continuous current / at DC / per signal cable / maximum 1 A display version • as status display of the inputs/outputs • for power supply / power LED product function / infeed function PE connection • shield connection • for feminals number of channels type of connecting terminal position / of the terminal levels internally linked type of electrical connection / for connecting cable number of peles / at the 1st interface number of peles / at the 1st interface number of the plug contacts / of the electrical connection wire length / maximum • for fiexible conductor / with core end processing • for flexible conductor / with core end processing • finely stranded / without core end processing	product designation	Connection module
• at DC / rated value 24 V • rated value 24 V • at DC / maximum 28.8 V ampacity / per pin / maximum 1 A continuous current / at DC / per signal cable / maximum 1 A total current / maximum 4 A display version EED yellow for "active high" • as status display of the inputs/outputs LED yellow for "active high" • for power supply / power LED Yes: green for 24 V DC O.K. product function / infeed function Yes product component No • PE connection No • shield connection No • shield connector Yes product feature / cross-connectable No connection method No number of terminals 28; 8 x l/O; 10 x L+, 10 x M number of terminals 8 type of connecting terminal Top number of terminal levels 1 design of terminal / terminal levels internally linked No type of electrical connection / for connecting cable Plue-in connection number of poles / at the 1st interface	electrical data	
arrated value at DC / maximum 28.8 V ampacity / per pin / maximum 1 A total current / at DC / per signal cable / maximum 1 A total current / maximum 4 A display version a status display of the inputs/outputs for power supply / power LED Yes; green for 24 V DC O.K. product function / infeed function PE connection Shelid connection Also connection Also connection Also connection Also connection Product feature / cross-connectable number of terminals 28; 8 x I/O; 10 x L+, 10 x M number of terminal levels Also push-in position / of the terminal levels Aledsign of terminal levels internally linked No pye of electrical connection / for connecting cable number of plaes / at the 1st interface number of the plug contacts / of the electrical connection if one connectable conductor cross-sections / solid vige of connectable conductor ross-sections / solid e for flexible conductor / with core end processing e stranded e finely stranded / without core end processing e frenely stranded / without core end processing e finely stranded / without core end processi	operating voltage	
e at DC / maximum ampacity / per pin / maximum 1 A continuous current / at DC / per signal cable / maximum 1 A display version as status display of the inputs/outputs for power supply / power LED Product function / infeed function PE connection a bileid connection bileid connection connection method connection method product feature / cross-connectable number of terminal position / of the terminal position / of the terminal position / of the terminal levels design of terminal / terminal levels number of poles / at the 1st interface number of the plug contacts / of the electrical connection product foonection / for connecting cable number of the plug contacts / of the electrical connection position / maximum yee of connectable conductor ross-section / soil purple of connectable conductor ross-sections / soilid connectable conductor / with core end processing a stranded finely stranded / without core end processing 1 A 4 A 4 A 4 A 4 A 4 A 4 A 4 A	at DC / rated value	24 V
ampacity / per pin / maximum 1 A continuous current / at DC / per signal cable / maximum 1 A total current / maximum 4 A display version a as status display of the inputs/outputs LED yellow for "active high" for power supply / power LED Yes; green for 24 V DC O.K. product function / infeed function Yes product component PE connection No shield connection No disconnector Yes product feature / cross-connectable No connection mothod number of terminals 28; 8 x I/O; 10 x L+, 10 x M number of channels 8 push-in position / of the terminal levels internally linked No type of celectrical connection / for connecting cable Plug-in connection number of terminal levels at the fact aconnection 16; IDC connector in mothod number of the plug contacts / of the electrical connection 1 wire length / maximum 30 m; between front connector module and Connection module type of connectable conductor cross-sections / solid e stranded stranded finely stranded / without core end processing 0.2 2.5 mm² 0.2 2.5 mm² finely stranded / without core end processing 0.2 2.5 mm²	• rated value	24 V
continuous current / at DC / per signal cable / maximum total current / maximum 4 A display version • as status display of the inputs/outputs • for power supply / power LED Product function / infeed function PE connection • PE connection • shield connection • disconnector product feature / cross-connectable connection method number of terminals number of channels type of connecting terminal levels design of terminal / terminal levels internally linked type of connection of the plug contacts / of the electrical connection number of the plug contacts / of the electrical connection 15 (B) C connector with installed strain relief for the connecting connectable conductor cross-sections / solid No connectable conductor cross-sections / solid of of reflexible conductor / with core end processing • stranded • finely stranded / without core end processing 0.2 2.5 mm²	at DC / maximum	28.8 V
total current / maximum display version	ampacity / per pin / maximum	1 A
total current / maximum display version	continuous current / at DC / per signal cable / maximum	1 A
• as status display of the inputs/outputs • for power supply / power LED Yes; green for 24 V DC O.K. product function / infeed function PE connection • PE connection • shield connection • shield connector • product feature / cross-connectable No connection method number of terminals position / of the terminal position / of the terminal levels design of terminal levels design of terminal (Yerminal levels internally linked number of pole of an ectical connection / 16; IDC connector with installed strain relief for the connecting cable number of the plug contacts / of the electrical connection wire length / maximum • for flexible conductor cross-section • for flexible conductor / with core end processing • finely stranded / without core end processing • finely stranded / without core end processing • finely stranded / without core end processing • finely stranded / without core end processing • finely stranded / without core end processing • finely stranded / without core end processing • connectable conductor / without core end processing		4 A
• for power supply / power LED roduct function / infeed function Yes roduct component • PE connection • shield connection • disconnector roduct feature / cross-connectable number of terminals type of connecting terminal position / of the terminal / terminal levels design of terminal / terminal levels design of terminal / terminal levels type of electrical connection / for connecting cable number of plug contacts / of the electrical connection number of the plug contacts / of the electrical connection vire length / maximum • for flexible conductor ross-section • for flexible conductor / with core end processing • stranded • finely stranded / without core end processing	display version	
product function / infeed function product component PE connection Shield connection disconnector Yes product feature / cross-connectable No connection method number of terminals number of channels 8 type of connecting terminal position / of the terminal number of terminal levels 1 design of terminal / terminal levels internally linked No type of electrical connection / for connecting cable number of poles / at the 1st interface number of the plug contacts / of the electrical connection wire length / maximum for connectable conductor cross-section for filexible conductor / with core end processing finely stranded / without core end processing No No Yes No No Yes No No Plus / in X L+, 10 x M No Push-in Top 1 1 1 1 1 1 1 1 1 1 1 1 1	 as status display of the inputs/outputs 	LED yellow for "active high"
product component PE connection Shield connection disconnector Yes Product feature / cross-connectable No connection method number of terminals 28; 8 x I/O; 10 x L+, 10 x M number of connecting terminal push-in position / of the terminal tevels 1 design of terminal / terminal levels design of terminal / terminal levels internally linked No type of electrical connection / for connecting cable number of the plug contacts / of the electrical connection 1 wire length / maximum type of connectable conductor cross-section of reflexible conductor / with core end processing of ninely stranded / without core end processing over the plug contact / of the length of the plug stranded / without core end processing over the plug contact / of the decendance of the plug stranded / without core end processing over the plug stranded / without core end processing over the plug stranded / without core end processing over the plug stranded / without core end processing over the plug stranded / without core end processing over the plug stranded / without core end processing over the plug stranded / without core end processing over the plug contact / of the electrical connection / over the plug stranded / over the plug	for power supply / power LED	Yes; green for 24 V DC O.K.
PE connection Shield connection Shield connector Yes product feature / cross-connectable No connection method number of terminals 128; 8 x I/O; 10 x L+, 10 x M number of terminals 128; 8 x I/O; 10 x L+, 10 x M number of connecting terminal position / of the terminal number of terminal levels 1 design of terminal / terminal levels design of terminal / terminal levels internally linked No type of electrical connection / for connecting cable number of poles / at the 1st interface 16; IDC connector with installed strain relief for the connecting cable number of the plug contacts / of the electrical connection vire length / maximum type of connectable conductor cross-sections / solid connectable conductor / with core end processing • for flexible conductor / with core end processing • stranded • finely stranded / without core end processing 0.2 2.5 mm² finely stranded / without core end processing 0.2 2.5 mm² 100 100 100 100 100 100 100	product function / infeed function	Yes
 shield connection disconnector Yes product feature / cross-connectable No connection method number of terminals 28; 8 x I/O; 10 x L+, 10 x M number of channels 8 type of connecting terminal position / of the terminal position / of the terminal levels design of terminal levels internally linked type of electrical connection / for connecting cable plug-in connection number of poles / at the 1st interface number of the plug contacts / of the electrical connection wire length / maximum type of connectable conductor cross-sections / solid connectable conductor cross-section for flexible conductor / with core end processing stranded finely stranded / without core end processing 0.2 2.5 mm² finely stranded / without core end processing 0.2 2.5 mm² 	product component	
• disconnector product feature / cross-connectable No connection method number of terminals 28; 8 x I/O; 10 x L+, 10 x M number of channels 8 type of connecting terminal position / of the terminal number of terminal levels 1 design of terminal / terminal levels internally linked type of electrical connection / for connecting cable Plug-in connection number of poles / at the 1st interface 16; IDC connector with installed strain relief for the connecting cable number of the plug contacts / of the electrical connection wire length / maximum 30 m; between front connector module and Connection module type of connectable conductor cross-sections • for flexible conductor / with core end processing • stranded • finely stranded / without core end processing 0.2 2.5 mm² finely stranded / without core end processing 0.2 2.5 mm²	 PE connection 	No
product feature / cross-connectable number of terminals number of channels type of connecting terminal position / of the terminal push-in position / of the terminal push-in number of terminal levels design of terminal / terminal levels internally linked type of electrical connection / for connecting cable number of poles / at the 1st interface number of the plug contacts / of the electrical connection vire length / maximum type of connectable conductor cross-sections of for flexible conductor / with core end processing of the stranded of finely stranded / without core end processing 28, 8 x I/O; 10 x L+, 10 x M 8 28, 8 x I/O; 10 x L+, 10 x M No 10 x L+, 10 x M No 11 connecting x M No No 11 connecting cable No 12 connecting cable Plug-in connection 13 connectable strain relief for the connecting cable No 14 connectable connector module and Connection module No 15 connectable conductor cross-sections of flexible conductor / with core end processing 0.2 2.5 mm²; End sleeve according to DIN 46228/1 or DIN 46228/4 with plastic collar of the plug contacts / of the electrical connection or DIN 46228/4 with plastic collar 0.2 2.5 mm² 0.2 2.5 mm²	shield connection	No
number of terminals number of channels type of connecting terminal position / of the terminal number of terminal levels design of terminal / terminal levels internally linked type of electrical connection / for connecting cable number of poles / at the 1st interface number of the plug contacts / of the electrical connection wire length / maximum type of connectable conductor cross-sections of the firstible conductor / with core end processing of the first interface of neight / maximum of the plug contacts / of the electrical connection of the plug contacts / of the electrical connection of the plug contacts / of the electrical connection of the plug contacts / of the electrical connection 1 No connectable conductor cross-sections of reflexible conductor / with core end processing of the plug contacts / of the electrical connection of the plug contacts / of the electrical connection 1 No connectable conductor cross-section of reflexible conductor / with core end processing of the plug contacts / of the electrical connection of the plug contacts / of the electrical connection 1 No connectable conductor cross-section of reflexible conductor / with core end processing of the plug contacts / of the electrical connection of the plug contacts / of the electrical connection 1 No connectable conductor cross-section of reflexible conductor / with core end processing of the plug in the the plug in the plug	• disconnector	Yes
number of terminals number of channels type of connecting terminal position / of the terminal top number of terminal levels design of terminal / terminal levels internally linked No type of electrical connection / for connecting cable plug-in connection number of poles / at the 1st interface number of the plug contacts / of the electrical connection vire length / maximum type of connectable conductor cross-sections / solid connectable conductor cross-section of for flexible conductor / with core end processing of stranded finely stranded / without core end processing 28; 8 x I/O; 10 x L+, 10 x M 8 No 10 10 10 10 10 10 10 10 10 1	product feature / cross-connectable	No
number of channels type of connecting terminal position / of the terminal position / of the terminal position / of the terminal top number of terminal levels design of terminal / terminal levels internally linked No type of electrical connection / for connecting cable plug-in connection number of poles / at the 1st interface number of the plug contacts / of the electrical connection ivire length / maximum type of connectable conductor cross-sections / solid connectable conductor cross-section of of flexible conductor / with core end processing stranded of finely stranded / without core end processing vertical connection gushe number of the plug contacts / of the electrical connection 1 No connectable conductor cross-section of or flexible conductor / with core end processing of the plug contacts / of the electrical connection of the plug contacts / of the electrical connection 1 No connectable conductor cross-section of the plug contacts / of the electrical connection of the plug contacts / of the connection module No connectable conductor cross-section of the plug contacts / of the electrical connection of the plug contacts / of the electrical connection 1 No connectable conductor cross-section of the plug contacts / of the electrical connection No connectable conductor cross-section of the plug contacts / of the electrical connection 1 No connectable conductor cross-section of the plug contacts / of the electrical connection 1 No connectable conductor cross-section of the plug contacts / of the electrical connection 1 No connectable conductor cross-section of the plug contacts / of the electrical connection 1 virial connectable strain relief for the connection 1 No connectable strain relief for the connection 1 virial connectable	connection method	
type of connecting terminal position / of the terminal levels 1 design of terminal / terminal levels internally linked No type of electrical connection / for connecting cable Plug-in connection number of poles / at the 1st interface 16; IDC connector with installed strain relief for the connecting cable number of the plug contacts / of the electrical connection 1 wire length / maximum 30 m; between front connector module and Connection module type of connectable conductor cross-sections / solid connectable conductor ross-section • for flexible conductor / with core end processing • stranded • stranded • finely stranded / without core end processing 0.2 2.5 mm² 0.2 2.5 mm² 0.2 2.5 mm²	number of terminals	28; 8 x I/O; 10 x L+, 10 x M
position / of the terminal number of terminal levels design of terminal / terminal levels internally linked type of electrical connection / for connecting cable number of poles / at the 1st interface number of the plug contacts / of the electrical connection vire length / maximum type of connectable conductor cross-sections / solid connectable conductor cross-section • for flexible conductor / with core end processing • stranded • finely stranded / without core end processing Top 1 No 1 No 2.2 2.5 mm² 0.2 2.5 mm² 0.2 2.5 mm² 0.2 2.5 mm²	number of channels	8
number of terminal levels design of terminal / terminal levels internally linked No type of electrical connection / for connecting cable number of poles / at the 1st interface number of the plug contacts / of the electrical connection vire length / maximum type of connectable conductor cross-sections / solid connectable conductor cross-section • for flexible conductor / with core end processing • stranded • finely stranded / without core end processing 1 No 1 No 1 No 2.2.5 mm²; End sleeve according to DIN 46228/1 or DIN 46228/4 with plastic collar 0.2 2.5 mm² 0.2 2.5 mm² 0.2 2.5 mm²	type of connecting terminal	push-in
design of terminal / terminal levels internally linked type of electrical connection / for connecting cable number of poles / at the 1st interface number of the plug contacts / of the electrical connection wire length / maximum type of connectable conductor cross-sections / solid connectable conductor cross-section • for flexible conductor / with core end processing • stranded • finely stranded / without core end processing No Plug-in connection 1 Plug-in connection 1 No 1 No 2 2.5 mm²; End sleeve according to DIN 46228/1 or DIN 46228/4 with plastic collar 0.2 2.5 mm² 0.2 2.5 mm² 0.2 2.5 mm²	position / of the terminal	Тор
type of electrical connection / for connecting cable number of poles / at the 1st interface number of the plug contacts / of the electrical connection vire length / maximum type of connectable conductor cross-sections / solid connectable conductor cross-section • for flexible conductor / with core end processing • stranded • finely stranded / without core end processing Plug-in connection 16; IDC connector with installed strain relief for the connecting cable No 10; IDC connector with installed strain relief for the connecting cable 10; IDC connector with installed strain relief for the connecting cable 10; IDC connector with installed strain relief for the connecting cable 10; IDC connector with installed strain relief for the connecting cable 10; IDC connector with installed strain relief for the connecting cable 10; IDC connector with installed strain relief for the connecting cable 10; IDC connector with installed strain relief for the connecting cable 10; IDC connector with installed strain relief for the connecting cable 10; IDC connector with installed strain relief for the connecting cable 10; IDC connector with installed strain relief for the connecting cable 10; IDC connector with installed strain relief for the connecting cable 10; IDC connector with installed strain relief for the connection and installed strain relief for the conn	number of terminal levels	1
number of poles / at the 1st interface 16; IDC connector with installed strain relief for the connecting cable 16; IDC connector with installed strain relief for the connecting cable 18 19 10 10 10 10 10 10 10 10 10	design of terminal / terminal levels internally linked	No
number of the plug contacts / of the electrical connection wire length / maximum 30 m; between front connector module and Connection module type of connectable conductor cross-sections / solid connectable conductor cross-section • for flexible conductor / with core end processing • stranded • stranded • finely stranded / without core end processing 1 30 m; between front connector module and Connection module No 0.2 2.5 mm²; End sleeve according to DIN 46228/1 or DIN 46228/4 with plastic collar 0.2 2.5 mm² 0.2 2.5 mm²	type of electrical connection / for connecting cable	Plug-in connection
wire length / maximum type of connectable conductor cross-sections / solid connectable conductor cross-section • for flexible conductor / with core end processing • stranded • finely stranded / without core end processing 30 m; between front connector module and Connection module No 0.2 2.5 mm²; End sleeve according to DIN 46228/1 or DIN 46228/4 with plastic collar 0.2 2.5 mm² 0.2 2.5 mm²	number of poles / at the 1st interface	16; IDC connector with installed strain relief for the connecting cable
type of connectable conductor cross-sections / solid connectable conductor cross-section • for flexible conductor / with core end processing • stranded • finely stranded / without core end processing No 0.2 2.5 mm²; End sleeve according to DIN 46228/1 or DIN 46228/4 with plastic collar 0.2 2.5 mm² 0.2 2.5 mm²	number of the plug contacts / of the electrical connection	1
connectable conductor cross-section • for flexible conductor / with core end processing • stranded • finely stranded / without core end processing 0.2 2.5 mm²; End sleeve according to DIN 46228/1 or DIN 46228/4 with plastic collar 0.2 2.5 mm² 0.2 2.5 mm²	wire length / maximum	30 m; between front connector module and Connection module
 for flexible conductor / with core end processing 0.2 2.5 mm²; End sleeve according to DIN 46228/1 or DIN 46228/4 with plastic collar stranded finely stranded / without core end processing 0.2 2.5 mm² 0.2 2.5 mm² 	type of connectable conductor cross-sections / solid	No
plastic collar • stranded • finely stranded / without core end processing 0.2 2.5 mm² 0.2 2.5 mm²	connectable conductor cross-section	
• finely stranded / without core end processing 0.2 2.5 mm²	• for flexible conductor / with core end processing	
.,	• stranded	0.2 2.5 mm²
• finely stranded / with core end processing 0.2 2.5 mm²	 finely stranded / without core end processing 	0.2 2.5 mm²
	 finely stranded / with core end processing 	0.2 2.5 mm²

number of cables / per connection		2; Connection for internal system: Combination of 1 or 2 Wires until the sum total of cross sections be achieved in a ferrule.		
width of screwdriver blade	3.5 mm			
standards, specifications, approvals				
certificate of suitability				
cULus approval	Yes			
design tested acc. to type of protection / EEx e	No			
overvoltage category	2			
degree of pollution	2			
combustibility class according to UL 94	V1			
standards, specifications, approvals / Environmental Produ	uct Declaration			
Environmental Product Declaration	Yes			
global warming potential [CO2 eq]				
• total	34.3 kg	34.3 kg		
 during manufacturing 	1.4 kg	1.4 kg		
 during operation 	32.8 kg	32.8 kg		
after end of life	0.13 kg			
ambient conditions				
ambient temperature				
during operation	0 60 °C			
during storage	-40 +70 °C			
mechanical data				
width × height × depth	57 mm × 76 mm × 60 mm			
mounting type	DIN rail 35 mm, DIN rail 15 mm	1		
mounting position	any			
height / with lowest-profile installation	60 mm			
net weight	0.18 kg			
insulation material	other			
color				
of the enclosure	grey			
of the light source	other	other		
product component / required / end cover plate	No			
further information / internet links				
internet link				
• to website: Industry Mall	https://mall.industry.siemens.co	<u>om</u>		
• to web page: selection aid TIA Selection Tool	https://www.siemens.com/tstclo	https://www.siemens.com/tstcloud		
• to web page: system cabling	https://siemens.com/simatic-top	https://siemens.com/simatic-top-connect		
• to website: CAx-Download-Manager	https://siemens.com/cax	https://siemens.com/cax		
• to website: Industry Online Support	https://support.industry.siemens	https://support.industry.siemens.com		
additional information				
other information	Specifications at rated input vol	Itage and ambient temper	ature +25 °C (unless	
marketing text	otherwise specified) The TP3s connection module for	or a 3-wire connection wit	h 8 channels and	
	potential connection with push- signals and LEDs for signalling cables of the peripherals and th is mounted on the DIN rail and,	potential connection with push-in terminals, dip switches for separating the signals and LEDs for signalling forms the interface between the connection cables of the peripherals and the SIMATIC S7 that come in from the field. This is mounted on the DIN rail and, thanks to its functionality with push-in terminals is precisely adapted to the respective task. This connection module is part of the fully modular SIMATIC TOP connect connection for the fastest and safest system cabling. In addition to low wiring costs, error sources in cabling can be significantly reduced. Sensors and actuators from the peripherals are combined with the connection modules of SIMATIC TOP connect and connected to the SIMATIC S7-300/1500 via cable and front plug-in module.		
	system cabling. In addition to lo significantly reduced. Sensors a with the connection modules of			
Classifications				
		Version	Classification	
	eClass	14	27-25-01-12	
	001000			
	a Olar -	40	27 44 44 22	
	eClass	12	27-14-11-28	
	eClass eClass	12 9.1	27-14-11-28 27-14-11-28	
	eClass	9.1	27-14-11-28	
	eClass eClass eClass	9.1 9	27-14-11-28 27-14-11-28	
	eClass eClass	9.1 9 8	27-14-11-28 27-14-11-28 27-14-11-28	

ETIM	9	EC000900
ETIM	8	EC000900
ETIM	7	EC000900
UNSPSC	15	39-12-14-10

Approvals / Certificates

General Product Approval EMV Environment

Declaration of Conformity

Manufacturer Declaration









last modified:

4/9/2025

