

Preface

This manual provides the information needed to install, wire, and configure the SIMATIC® TI505™ Input/Output modules listed below.

- Discrete Input Modules (AC Input):

PPX:505-4008	PPX:505-4016	PPX:505-4032
PPX:505-4008-A	PPX:505-4016-A	PPX:505-4032-A
PPX:505-4208	PPX:505-4216	PPX:505-4232
PPX:505-4208-A	PPX:505-4216-A	PPX:505-4232-A
PPX:505-4408	PPX:505-4416	PPX:505-4432*
PPX:505-4408-A	PPX:505-4416-A	PPX:505-4432-A*

- Discrete Input Modules (DC Input):

PPX:505-4108	PPX:505-4116	PPX:505-4132
PPX:505-4308	PPX:505-4316	PPX:505-4332
PPX:505-4316-A		

- Discrete Output Modules (DC Sinking):

PPX:505-3508	PPX:505-3516	PPX:505-3532
PPX:505-3708*	PPX:505-3716*	PPX:505-3732*

- Discrete Output Modules (DC Sourcing):

PPX:505-4508	PPX:505-4516	PPX:505-4532
PPX:505-4708*	PPX:505-4716*	PPX:505-4732*

- Discrete Output Modules (AC Output):

PPX:505-4608	PPX:505-4616	PPX:505-4632
PPX:505-4808*	PPX:505-4816*	PPX:505-4832*

- Relay Output Modules:

PPX:505-4908	PPX:505-4916	PPX:505-4932*
PPX:505-5417		
PPX:505-5518		

- Word Input Module:

PPX:505-6308*		
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- Word Output Module:

PPX:505-6408*		
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- Input Simulator:

PPX:505-6010		
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- Output Simulator:

PPX:505-6011		
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* double-wide

1.4 Fuses

Discrete Output Modules

Fuses on the Discrete AC and DC Output modules are located on the Printed Circuit Board (PCB). (Figure 1-1 shows these boards.) There are four fuses on the module, one for each common. To gain access to the fuses, remove the module from the base.

WARNING

Disable all power to the module and base before attempting to replace a fuse. Failure to do so may result in injury to personnel or damage to equipment.

CAUTION

The fuse protects the PCB and minimizes the risk of fire in case of an overload. The fuse does not always protect the output circuit.

The red indicator located at the bottom of the LED array on each Discrete Output DC module indicates a blown fuse in an output circuit. The AC modules do not have blown fuse indicators. Note that the modules are supplied from the factory with UL/CSA approved fuses. Table 1-2 lists the fuses, their ratings, and spare part numbers.

Table 1-2 Agency-Approved Fuses for Discrete Output Modules

Module	Description	UL/CSA	IEC
PPX:505-3508	1/2 A DC Output	3.0 A 125 V	2.5 A 250 V
PPX:505-3516	1/2 A DC Output	Normal Blow	Normal Blow
PPX:505-3532	1/2 A DC Output	5 x 20 mm	5 x 20 mm
PPX:505-4508	1/2 A DC Output	San-O-Ind. Corp.	San-O-Ind.corp.
PPX:505-4516	1/2 A DC Output	TSC	EQ
PPX:505-4532	1/2 A DC Output	or equivalent (2587679-8012)	or equivalent
PPX:505-4608	24-110 VAC Output	3.15 A 125 V	2.5 A 250 V
PPX:505-4616	24-110 VAC Output	Normal Blow	Normal Blow
PPX:505-4632	24-110 VAC Output	5 x 20 mm	5 x 20 mm
PPX:505-3708	2 A DC Output	San-O-Ind. Corp.	San-O-Ind.corp.
PPX:505-3716	2 A DC Output	TSC	EQ
PPX:505-3732	2 A DC Output	or equivalent (2587679-8014)	or equivalent
PPX:505-4708	2 A DC Output		
PPX:505-4716	2 A DC Output		
PPX:505-4732	2 A DC Output		
PPX:505-4808	110-220 VAC Output	5 A 250 V	No IEC
PPX:505-4816	110-220 VAC Output	Normal Blow	equivalent
PPX:505-4832	110-220 VAC Output	.25" x 1.25" San-O-Ind. Corp. SS2-5 A or equivalent (2587679-8013)	

**Table 3-8 Terminal Block Pin-out: 32-Point Discrete DC Output Modules
(PPX:505-3532, PPX:505-3732, PPX:505-4532, and PPX:505-4732)**

User Connection	User Connection
AR = User-Power (-)	AC = User-Power (+)
A1 = Output 1	A5 = Output 5
A2 = Output 2	A6 = Output 6
A3 = Output 3	A7 = Output 7
A4 = Output 4	A8 = Output 8
BR = User-Power (-)	BC = User-Power (+)
B1 = Output 9	B5 = Output 13
B2 = Output 10	B6 = Output 14
B3 = Output 11	B7 = Output 15
B4 = Output 12	B8 = Output 16
CR = User-Power (-)	CC = User-Power (+)
C1 = Output 17	C5 = Output 21
C2 = Output 18	C6 = Output 22
C3 = Output 19	C7 = Output 23
C4 = Output 20	C8 = Output 24
DR = User-Power (-)	DC = User-Power (+)
D1 = Output 25	D5 = Output 29
D2 = Output 26	D6 = Output 30
D3 = Output 27	D7 = Output 31
D4 = Output 28	D8 = Output 32

Discrete Output Modules

Table A-9 through Table A-12 contains the electrical specifications for the 505 Discrete Output modules and Figure A-7 through Figure A-10 show derating curves for the same.

Table A-9 Electrical Specifications for 6–24 VDC 1/2 Amp Output Modules (PPX:505–35xx and PPX:505–45xx)

Model Number	No. of Outputs	Module Width
PPX:505–3508	8	Single-wide
PPX:505–3516	16	Single-wide
PPX:505–3532	32	Single-wide
PPX:505–4508	8	Single-wide
PPX:505–4516	16	Single-wide
PPX:505–4532	32	Single-wide

Rated Voltage	6–24 VDC
Operating voltage range	4.5–34 VDC
Min. load per point	5 mA
Temporary overload	2.0 A for 1 ms
Max. on-state voltage drop	1.8 VDC
Max. off-state leakage current	0.2 mA
Kickback protection	Diode
Max. Delay time through module (with 5 mA min. load)	1 ms on to off 1 ms off to on
User power current with no load	3.0 mA/common
Max. module power from base	2.5 W
Reverse voltage protection at power terminals	34 VDC
Type of outputs	Non-latching type, unprotected
Output fuse rating	3 A, 125 V 5 x 20 mm, normal blow

Electrical Specifications (continued)

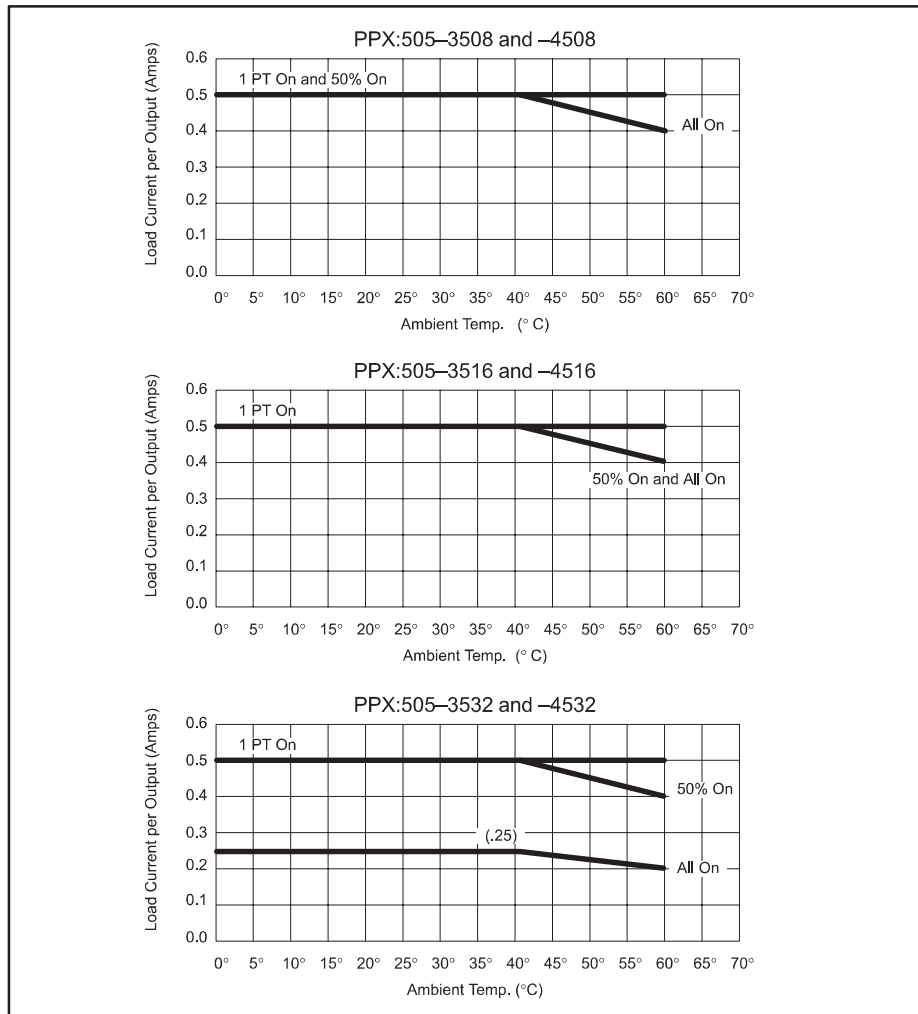


Figure A-7 Derating Curves for PPX:505-35xx and PPX:505-45xx Modules