2

Options
### 9000X Series Option Board Kits

The 9000X Series drives can accommodate a wide selection of expander and adapter option boards to customize the drive for your application needs. The drive's control unit is designed to accept a total of five option boards.

The 9000X Series factory installed standard board configuration includes an A9 I/O board and an A2 relay output board, which are installed in slots A and B.

Option Boards
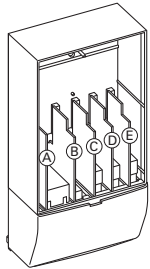
Option Board Kits

Option Kit Description [1]	Allowed Slot Locations [2]	Field Installed Catalog Number	Factory Installed Option Designator	Basic	Local/ Remote	Standard	MSS	PID	Multi-P.	PFC
Standard I/O Cards										
6 DI, 1 DO, 2 AI, 1 AO, 1 +10 Vdc ref, 2 ext +24 Vdc/EXT +24 Vdc	A	**OPTA9**	—	■	■	■	■	■	■	■
2 RO (NC-NO)	B	**OPTA2**	—	■	■	■	■	■	■	■
Extended I/O Cards										
2 RO, therm	B	**OPTA3**	A3	—	■	■	■	■	■	■
Encoder low volt +5 V/15 V/24 V	C	**OPTA4**	A4	—	■	■	■	■	■	■
Encoder high volt +15 V/24 V	C	**OPTA5**	A5	—	■	■	■	■	■	■
Double encoder—SPX only	C	**OPTA7**	A7	■	■	■	■	■	■	■
6 DI, 1 DO, 2 AI, 1 AO	A	**OPTA8**	A8	—	■	■	■	■	■	■
6 DI, 1 DO, 2 AI, 1 AO, 1 +10 Vdc ref, 2 ext +24 Vdc/EXT +24 Vdc	A	**OPTA1**	—	■	■	■	■	■	■	■
3 DI (encoder 10–24 V), out +15 V/+24 V, 2 DO (pulse+direction)—SPX only	C	**OPTAE**	AE	■	■	■	■	■	■	■
6 DI, 1 DO, 2 AI, 1 AO, 1 +10 Vdc ref, 2 ext +24 Vdc/EXT +24 Vdc	A	**OPTAFA1**	—	■	■	■	■	■	■	■
6 DI, 1 ext +24 Vdc/EXT +24 Vdc	B, C, **D**, E	**OPTB1**	B1	—	—	—	—	—	■	■
1 RO (NC-NO), 1 RO (NO), 1 therm	B, C, **D**, E	**OPTB2**	B2	—	—	—	—	—	■	■
1 AI (mA isolated), 2 AO (mA isolated), 1 ext +24 Vdc/EXT +24 Vdc	B, C, **D**, E	**OPTB4**	B4	—	■	■	■	■	■	■
3 RO (NO)	B, C, **D**, E	**OPTB5**	B5	—	—	—	—	—	■	■
1 ext +24 Vdc/EXT +24 Vdc, 3 Pt100	B, C, **D**, E	**OPTB8**	B8	—	—	—	—	—	—	—
1 RO (NO), 5 DI 42–240 Vac input	B, C, **D**, E	**OPTB9**	B9	—	—	—	—	—	■	■
SPI, absolute encoder	C	**OPTBB**	BB	—	—	—	—	—	—	—
Communication Cards										
Modbus RTU	D, E	OPTC2	C2	■	■	■	■	■	■	■
Modbus RTU (D9 connector)	D, E	OPTC8	C8	■	■	■	■	■	■	■
PROFIBUS DP	D, E	OPTC3	C3	■	■	■	■	■	■	■
PROFIBUS DP (D9 connector)	D, E	OPTC5	C5	■	■	■	■	■	■	■
Johnson Controls N2	D, E	OPTC2	CA	—	—	—	—	—	—	—
BACnet MSTP	D, E	OPTCJ	CJ	■	■	■	■	■	■	■
LonWorks	D, E	OPTC4	C4	■	■	■	■	■	■	■
CANopen (slave)	D, E	OPTC6	C6	■	■	■	■	■	■	■
DeviceNet	D, E	OPTC7	C7	■	■	■	■	■	■	■
Modbus TCP	D, E	OPTCI	CI	■	■	■	■	■	■	■
EtherNet/IP	D, E	OPTCQ	CQ	■	■	■	■	■	■	■
PROFINET, Modbus TCP, EtherNet/IP (dual-port) [4]	D, E	OPTE9	E9	■	■	■	■	■	■	■
EtherCAT (dual-port) [4]	D, E	OPTEC	EC	■	■	■	■	■	■	■
SPX adapter	D, E	OPTD1	D1	■	■	■	■	■	■	■
SPX adapter	D, E	OPTD2	D2	■	■	■	■	■	■	■
RS-232 adapter	D, E	OPTD3	D3	■	■	■	■	■	■	■

Notes

[1] AI = Analog Input; AO = Analog Output, DI = Digital Input, DO = Digital Output, RO = Relay Output

[2] Option card must be installed in one of the slots listed for that card. Slot indicated in bold is the preferred location.

[3] OPTC2 is a multi-protocol option card.