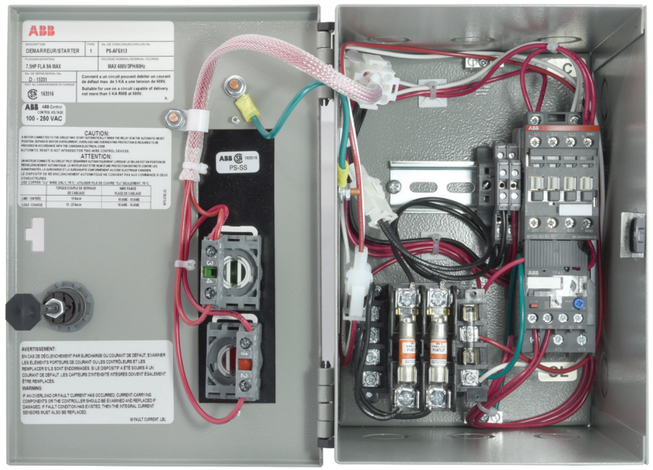
PRO-S Enclosed Starters

Quick Selection Guide

How to order and assemble your starter

Step 1: select your basic starter as per Table 1 or Table 2
Step 2: select your overload relay as per Table 3 and install in starter
Step 3: select your control transformer as per Table 4 and install as per picture 1 and 2
Step 4: select your pilot device kit as per Table 5 and install as per picture 3 and 4
Step 5: if required, order the auxiliary contacts as per Table 6 and clip on to front or side of contactor





01



02



03



04

See reverse for details on accessories and an example on how to order.

TABLE 1

	Max. motor HP	Non-Combination, across the line starter			Combination, across the line starter with non-fusible disconnect switch			Combination, across the line starter with fusible disconnect switch		
		Type 1 Enclosure	Type 4/12 Enclosure	Type 4X Enclosure	Type 1 Enclosure	Type 4/12 Enclosure	Type 4X Enclosure	Type 1 Enclosure	Type 4/12 Enclosure	Type 4X Enclosure
120Vac Single-phase applications	**0.75**	PS-AFAX13	PS-AFAX43	PS-AFAXX3	PS-AFAN13	PS-AFAN43	PS-AFANX3	PS-AFAF13	PS-AFAF43	PS-AFAFX3
	1.5	PS-0FAX13	PS-0FAX43	PS-0FAXX3	PS-0FAN13	PS-0FAN43	PS-0FANX3	PS-0FAF13	PS-0FAF43	PS-0FAFX3
	2	PS-1FAX13	PS-1FAX43	PS-1FAXX3	PS-1FAN13	PS-1FAN43	PS-1FANX3	PS-1FAF13	PS-1FAF43	PS-1FAFX3
	3	PS-2FAX13	PS-2FAX43	PS-2FAXX3	PS-2FAN13	PS-2FAN43	PS-2FANX3	PS-2FAF13	PS-2FAF43	PS-2FAFX3
	7.5	PS-3FAX13	PS-3FAX43	PS-3FAXX3	PS-3FAN13	PS-3FAN43	PS-3FANX3	PS-3FAF13	PS-3FAF43	PS-3FAFX3
240Vac Single-phase applications	**1.5**	PS-AFBX13	PS-AFBX43	PS-AFBXX3	PS-AFBN13	PS-AFBN43	PS-AFBNX3	PS-AFBF13	PS-AFBF43	PS-AFBFX3
	3	PS-0FBX13	PS-0FBX43	PS-0FBXX3	PS-0FBN13	PS-0FBN43	PS-0FBNX3	PS-0FBF13	PS-0FBF43	PS-0FBFX3
	5	PS-1FBX13	PS-1FBX43	PS-1FBXX3	PS-1FBN13	PS-1FBN43	PS-1FBNX3	PS-1FBF13	PS-1FBF43	PS-1FBFX3
	10	PS-2FBX13	PS-2FBX43	PS-2FBXX3	PS-2FBN13	PS-2FBN43	PS-2FBNX3	PS-2FBF13	PS-2FBF43	PS-2FBFX3
	15	PS-3FBX13	PS-3FBX43	PS-3FBXX3	PS-3FBN13	PS-3FBN43	PS-3FBNX3	PS-3FBF13	PS-3FBF43	PS-3FBFX3

TABLE 2

	Max. motor HP	Non-Combination, across the line starter			Combination, across the line starter with non-fusible disconnect switch			Combination, across the line starter with fusible disconnect switch		
		Type 1 Enclosure	Type 4/12 Enclosure	Type 4X Enclosure	Type 1 Enclosure	Type 4/12 Enclosure	Type 4X Enclosure	Type 1 Enclosure	Type 4/12 Enclosure	Type 4X Enclosure
208Vac Three-phase applications	**2**	PS-AFSX13	PS-AFSX43	PS-AFSXX3	PS-AFSN13	PS-AFSN43	PS-AFSNX3	PS-AFSF13	PS-AFSF43	PS-AFSFX3
	5	PS-0FSX13	PS-0FSX43	PS-0FSXX3	PS-0FSN13	PS-0FSN43	PS-0FSNX3	PS-0FSF13	PS-0FSF43	PS-0FSFX3
	10	PS-1FSX13	PS-1FSX43	PS-1FSXX3	PS-1FSN13	PS-1FSN43	PS-1FSNX3	PS-1FSF13	PS-1FSF43	PS-1FSFX3
	15	PS-2FSX13	PS-2FSX43	PS-2FSXX3	PS-2FSN13	PS-2FSN43	PS-2FSNX3	PS-2FSF13	PS-2FSF43	PS-2FSFX3
	25	PS-3FSX13	PS-3FSX43	PS-3FSXX3	PS-3FSN13	PS-3FSN43	PS-3FSNX3	PS-3FSF13	PS-3FSF43	PS-3FSFX3
	40	PS-4FSX13	PS-4FSX43	PS-4FSXX3	PS-4FSN13	PS-4FSN43	PS-4FSNX3	PS-4FSF13	PS-4FSF43	PS-4FSFX3
240Vac Three-phase applications	**2**	PS-AFSX13	PS-AFSX43	PS-AFSXX3	PS-AFSN13	PS-AFSN43	PS-AFSNX3	PS-AFSF13	PS-AFSF43	PS-AFSFX3
	5	PS-0FSX13	PS-0FSX43	PS-0FSXX3	PS-0FSN13	PS-0FSN43	PS-0FSNX3	PS-0FSF13	PS-0FSF43	PS-0FSFX3
	10	PS-1FSX13	PS-1FSX43	PS-1FSXX3	PS-1FSN13	PS-1FSN43	PS-1FSNX3	PS-1FSF13	PS-1FSF43	PS-1FSFX3
	20	PS-2FSX13	PS-2FSX43	PS-2FSXX3	PS-2FSN13	PS-2FSN43	PS-2FSNX3	PS-2FSF13	PS-2FSF43	PS-2FSFX3
	30	PS-3FSX13	PS-3FSX43	PS-3FSXX3	PS-3FSN13	PS-3FSN43	PS-3FSNX3	PS-3FSF13	PS-3FSF43	PS-3FSFX3
	50	PS-4FSX13	PS-4FSX43	PS-4FSXX3	PS-4FSN13	PS-4FSN43	PS-4FSNX3	PS-4FSF13	PS-4FSF43	PS-4FSFX3
480Vac Three-phase applications	**5**	PS-AFSX13	PS-AFSX43	PS-AFSXX3	PS-AFSN13	PS-AFSN43	PS-AFSNX3	PS-AFSF13	PS-AFSF43	PS-AFSFX3
	10	PS-0FSX13	PS-0FSX43	PS-0FSXX3	PS-0FSN13	PS-0FSN43	PS-0FSNX3	PS-0FSF13	PS-0FSF43	PS-0FSFX3
	20	PS-1FSX13	PS-1FSX43	PS-1FSXX3	PS-1FSN13	PS-1FSN43	PS-1FSNX3	PS-1FSF13	PS-1FSF43	PS-1FSFX3
	40	PS-2FSX13	PS-2FSX43	PS-2FSXX3	PS-2FSN13	PS-2FSN43	PS-2FSNX3	PS-2FSF13	PS-2FSF43	PS-2FSFX3
	60	PS-3FSX13	PS-3FSX43	PS-3FSXX3	PS-3FSN13	PS-3FSN43	PS-3FSNX3	PS-3FSF13	PS-3FSF43	PS-3FSFX3
	100	PS-4FSX13	PS-4FSX43	PS-4FSXX3	PS-4FSN13	PS-4FSN43	PS-4FSNX3	PS-4FSF13	PS-4FSF43	PS-4FSFX3
600Vac Three-phase applications	**7.5**	PS-AFSX13	PS-AFSX43	PS-AFSXX3	PS-AFSN13	PS-AFSN43	PS-AFSNX3	PS-AFSF13	PS-AFSF43	PS-AFSFX3
	15	PS-0FSX13	PS-0FSX43	PS-0FSXX3	PS-0FSN13	PS-0FSN43	PS-0FSNX3	PS-0FSF13	PS-0FSF43	PS-0FSFX3
	25	PS-1FSX13	PS-1FSX43	PS-1FSXX3	PS-1FSN13	PS-1FSN43	PS-1FSNX3	PS-1FSF13	PS-1FSF43	PS-1FSFX3
	50	PS-2FSX13	PS-2FSX43	PS-2FSXX3	PS-2FSN13	PS-2FSN43	PS-2FSNX3	PS-2FSF13	PS-2FSF43	PS-2FSFX3
	75	PS-3FSX13	PS-3FSX43	PS-3FSXX3	PS-3FSN13	PS-3FSN43	PS-3FSNX3	PS-3FSF13	PS-3FSF43	PS-3FSFX3
	125	PS-4FSX13	PS-4FSX43	PS-4FSXX3	PS-4FSN13	PS-4FSN43	PS-4FSNX3	PS-4FSF13	PS-4FSF43	PS-4FSFX3

Note: All standard starter part numbers include a 100...250Vac coil. For different options, replace the “3“ at the end of the part number with desired code from the table below:

Voltage (50/60 Hz)	24 - 60	100 - 250	250 - 500
Coil code	1	3	4

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TABLE 3

	Single-phase		Three-phase				
	120Vac	240Vac	208Vac	240Vac	480Vac	600Vac	Part number (amperage range)
Overload relay sizing chart This table is to be used as a guidline based on CSA C22.2 No.14. Actual motor FLA will vary depending on manufacturer.	-	-	-	-	-	-	TF42-0.13 (0.10 ... 0.13)
	-	-	-	-	-	-	TF42-0.17 (0.13 ... 0.17)
	-	-	-	-	-	-	TF42-0.23 (0.17 ... 0.23)
	-	-	-	-	-	-	TF42-0.31 (0.23 ... 0.31)
	-	-	-	-	-	-	TF42-0.41 (0.31 ... 0.41)
	-	-	-	-	-	-	TF42-0.55 (0.41 ... 0.55)
	-	-	-	-	-	-	TF42-0.74 (0.55 ... 0.74)
	-	-	-	-	-	1/2	TF42-1.0 (0.74 ... 1.0)
	-	-	-	-	1/2	3/4	TF42-1.3 (1.0 ... 1.3)
	-	1/10	-	-	3/4	1	TF42-1.7 (1.3 ... 1.7)
	-	1/8, 1/6	-	1/2	1	-	TF42-2.3 (1.7 ... 2.3)
	1/10	1/4	1/2	-	1.5	1.5, 2	TF42-3.1 (2.3 ... 3.1)
	1/8	1/3	3/4	1	2	3	TF42-4.2 (3.1 ... 4.2)
	1/6	1/2	1	-	3	-	TF42-5.7 (4.2 ... 5.7)
	1/4, 1/3	3/4	1.5, 2	1.5, 2	5	5	TF42-7.6 (5.7 ... 7.6)
	1/2	1	-	3	-	7.5	TF42-10 (7.6 ... 10)
	-	1.5, 2	3	-	7.5	10	TF42-13 (10 ... 13)
	3/4	-	-	5	10	-	TF42-16 (13 ... 16)
	1	3	5	-	-	15	TF42-20 (16 ... 20)
	1.5, 2	-	-	7.5	15	20	TF42-24 (20 ... 24)
	-	5	7.5	10	20	25	TF42-29 (24 ... 29)
	-	-	10	-	-	-	TF42-35 (29 ... 35)
	-	-	-	-	-	-	TF65-28 (22 … 28)
	-	-	-	-	-	30	TF65-33 (25 … 33)
	3	7.5	-	-	25	-	TF65-40 (30 … 40)
	-	-	-	15	30	40	TF65-47 (36 … 47)
	-	10	15	-	40	50	TF65-53 (44 … 53)
	-	-	-	20	-	-	TF65-60 (50 … 60)
	-	-	-	-	-	-	TF65-67 (57 … 67)
	-	-	-	-	-	-	TF96-51 (40 … 51)
	5	-	-	-	-	-	TF96-60 (48 … 60)
	-	-	20	-	50	60	TF96-68 (57 … 68)
	-	15	25	25	60	75	TF96-78 (65 … 78)
	7.5	-	-	30	-	-	TF96-87 (75 … 87)
	-	-	-	-	-	-	TF96-96 (84 … 96)
	-	-	30	-	-	-	TF140DU-90 (66 … 90)
	-	-	-	40	75	100	TF140DU-110 (80 … 110)
	-	-	40	50	-	125	TF140DU-135 (100 … 135)
	-	-	-	-	100	-	TF140DU-142 (110 … 142)

TABLE 4

	Primary voltage	Secondary voltage	Part number
50VA Control transformers PS-Axxxx PS-0xxxx PS-1xxxx PS-2xxxx PS-3xxxx	120V	24V	PS-50-120/24
	208V	120V	PS-50-208/120
	208V	24V	PS-50-208/24
	240V	120V	PS-50-240/120
	240V	24V	PS-50-240/24
	480V	120V	PS-50-480/120
	480V	24V	PS-50-480/24
	600V	120V	PS-50-600/120
	600V	24V	PS-50-600/24
100VA Control transformers PS-4xxxx	120V	24V	PS-100-120/24
	208V	120V	PS-100-208/120
	208V	24V	PS-100-208/24
	240V	120V	PS-100-240/120
	240V	24V	PS-100-240/24
	480V	120V	PS-100-480/120
	480V	24V	PS-100-480/24
	600V	120V	PS-100-600/120
	600V	24V	PS-100-600/24

TABLE 5

	Pilot device type	Description	Part number
1 pilot device	2 Position Switch	OFF-ON	PS-SL2
	3 Position Switch	HAND-OFF-AUTO	PS-SL3
	Pilot Light	ON	PS-PL
	2 Position Switch	HORS-EN	PS-SL2-F
	3 Position Switch	MAN-HORS-AUTO	PS-SL3-F
	Pilot Light	EN SERVICE	PS-PL-F
2 pilot devices	Push buttons	START / STOP	PS-SS
	Push buttons	START / EMERGENCY STOP	PS-SE
	2 Position Switch + Pilot Light	OFF-ON / ON	PS-SL2I
	3 Position Switch + Pilot Light	HAND-OFF-AUTO / ON	PS-SL3I
	Push buttons	MARCHE / ARRET	PS-SS-F
	Push buttons	MARCHE / ARRET D'URGENCE	PS-SE-F
	2 Position Switch + Pilot Light	HORS-EN / EN SERVICE	PS-SL2I-F
	3 Position Switch + Pilot Light	MAN-HORS-AUTO / EN SERVICE	PS-SL3I-F
3 pilot devices	Push buttons + Pilot light	START / STOP / ON	PS-SSI
	2 Position Switch + Pilot lights	OFF-ON / ON / FAULT	PS-SL2IO
	3 Position Switch + Pilot lights	HAND-OFF-AUTO / ON / FAULT	PS-SL3IO
	Push buttons + Pilot light	MARCHE / ARRET / EN SERVICE	PS-SSI-F
	2 Position Switch + Pilot lights	HORS-EN / EN SERVICE / FAUTE	PS-SL2IO-F
	3 Position Switch + Pilot lights	MAN-HORS-AUTO / EN SERVICE / FAUTE	PS-SL3IO-F

Note: All kits with pilot lights include a 120Vac LED.

For different voltages or any other options, please refer to the System Pro-S Enclosed Starters catalogue # 1SXP133001C0201 or contact ep.support@ca.abb.com

TABLE 6

	Type	Used with	Part number
Auxiliary contacts	1 N.O.	PS-A, 0, 1, 2, 3	CA4-10
	1 N.C.	PS-A, 0, 1, 2, 3	CA4-01
	2 N.O. / 2 N.C.	PS-A, 0	CA4-22M
	2 N.O. / 2 N.C.	PS-1, 2, 3	CA4-22E
	1 N.O. / 1 N.C.	PS-4	CAL19-11

Ordering example

Customer wants a combination starter with a fusible disconnect switch for a 5HP motor at 600V with a 24Vac coil, with a 3 position selector switch and 2NO/2NC auxiliary contacts all in a type 12 enclosure. You need to order:

1. **PS-AFSF41** (as per table 2 for 3-phase starters)
2. **TF42-7.6** (as per table 3 for overload relay size)
3. **PS-50-600/24** (as per table 4 for control transformers)
4. **PS-SL3** (as per table 5 for pilot device kits)
5. **CA4-22M** (as per table 6 for auxiliary contacts)