

# IEC Manual Motor Starters Accessories

## Section 6

### Front Mounted (Internal) Accessories—Auxiliary and Alarm Contacts

Snap away the dust cover(s) and up to two front mounted accessories slide into the starter, increasing application flexibility without increasing width.

Accessory Type	For Use With	Mounting Position	Contact Configuration	Product Number	GO-10A2C
Auxiliary Contact (Front Mount)	GPS1*/GPS2*	Left or right front	1NC	GPAC01FBA	
Auxiliary Contact (Front Mount)	GPS1*/GPS2*	Left or right front	1NO	GPAC10FBA	
Alarm Contact (Front Mount)	GPS1*/GPS2*	Right front	1NC	GPAL01FRA	
Alarm Contact (Front Mount)	GPS1*/GPS2*	Right front	1NO	GPAL10FRA	
Front Aux. Position Cover (Package of 10)	GPS1*/GPS2*	Left or right front	N/A	GPAC0VF1A	

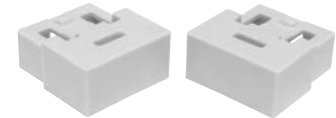


**GPAC\_ \_FBA**  
Front Mounted Auxiliary Contacts

### Side Mounted Accessories—Auxiliary and Alarm Contacts

Snap on accessories - maximum of [(2) auxiliary contact blocks] or [(1) auxiliary contact block plus (1) alarm/aux. block or (1) short circuit indicator] or [(1) alarm/auxiliary plus (1) short circuit indicator] left and (2) auxiliary contact blocks or (1) shunt trip or (1) under-voltage release right.

Accessory Type	For Use With	Mounting Position	Contact Configuration	Product Number	GO-10A2C
Auxiliary Contact (Side Mount)	GPS1*/GPS2*	Left	2NC	GPAC02LLA <sup>1</sup>	
Auxiliary Contact (Side Mount)	GPS1*/GPS2*	Left	1NO + 1NC	GPAC11LLA <sup>1</sup>	
Auxiliary Contact (Side Mount)	GPS1*/GPS2*	Left	2NO	GPAC20LLA <sup>1</sup>	
Auxiliary Contact (Side Mount)	GPS1*/GPS2*	Right	2NC	GPAC02LRA <sup>1</sup>	
Auxiliary Contact (Side Mount)	GPS1*/GPS2*	Right	1NO + 1NC	GPAC11LRA <sup>1</sup>	
Auxiliary Contact (Side Mount)	GPS1*/GPS2*	Right	2NO	GPAC20LRA <sup>1</sup>	
Alarm/Auxiliary Contact (Side Mount)	GPS1*/GPS2*	Left	1NC Alarm + 1NC Aux.	GPAD0101LLA	
Alarm/Auxiliary Contact (Side Mount)	GPS1*/GPS2*	Left	1NC Alarm + 1NO Aux.	GPAD0110LLA	
Alarm/Auxiliary Contact (Side Mount)	GPS1*/GPS2*	Left	1NO Alarm + 1NC Aux.	GPAD1001LLA	
Alarm/Auxiliary Contact (Side Mount)	GPS1*/GPS2*	Left	1NO Alarm + 1NO Aux.	GPAD1010LLA	
Short Circuit Alarm (Side Mount)	GPS1*/GPS2*	Left	1NO + 1NC	GPAE11LLA <sup>2</sup>	



**GPAC\_ \_FRA**  
Front Mounted Alarm Contacts

<sup>1</sup>GPS1BSAR and GPS1BHAR (24-32 FLA starters) can accept all accessory combinations noted above except that only one lateral auxiliary contact block may be used on this size.

<sup>2</sup>GPAE11LLA short circuit alarm may not be used with non-metallic enclosures due to reset button interference.



**GPAC\_ \_LLA/GPAC\_ \_LRA**  
Side Mounted Auxiliary Contacts



**GPAD\_ \_ \_LLA**  
Side Mounted Alarm/Auxiliary Contact



**GPAE11LLA**  
Side Mounted Short Circuit Alarm



# IEC Manual Motor Starters

## Accessories

## Section 6

### Side Mounted Accessories—Shunt Trip

Snap on accessories - maximum of (2) auxiliary contact blocks or (1) shunt trip or (1) undervoltage release right side.

Accessory Type	For Use With	Mounting Position	Coil Voltage	Product Number	GO-10A2C
Shunt Trip	GPS1*/GPS2*	Right	24V 60/50 Hz	GPASLRAA1	
Shunt Trip	GPS1*/GPS2*	Right	48V 60 Hz	GPASLRAAF	
Shunt Trip	GPS1*/GPS2*	Right	60V 60 Hz, 48V 50 Hz	GPASLRAAG	
Shunt Trip	GPS1*/GPS2*	Right	120V 60 Hz, 110-127V 50 Hz	GPASLRAAJ	
Shunt Trip	GPS1*/GPS2*	Right	208V 60 Hz	GPASLRAAM	
Shunt Trip	GPS1*/GPS2*	Right	240V 60 Hz, 220V 50 Hz	GPASLRAAN	
Shunt Trip	GPS1*/GPS2*	Right	277V 60 Hz, 240V 50 Hz	GPASLRAAR	
Shunt Trip	GPS1*/GPS2*	Right	380/400V 50 Hz	GPASLRAAU	
Shunt Trip	GPS1*/GPS2*	Right	460-480V 60 Hz, 415-440V 50 Hz	GPASLRAAW	
Shunt Trip	GPS1*/GPS2*	Right	600V 60 Hz, 500V 50 Hz	GPASLRAAY	
Shunt Trip	GPS1*/GPS2*	Right	24-60V DC	GPASLRADD	
Shunt Trip	GPS1*/GPS2*	Right	110-240V DC	GPASLRADJ	

De-energizes the controller when external signal is applied to shunt coil.



GPASLRA\_\_Shunt Trip

### Side Mounted Accessories—Undervoltage Release

Snap on accessories - maximum of (2) auxiliary contact blocks or (1) shunt trip or (1) undervoltage release right side.

Accessory Type	For Use With	Mounting Position	Coil Voltage	Product Number	GO-10A2C
Undervoltage Release	GPS1*/GPS2*	Right	24V 60 Hz	GPAULRAAC	
Undervoltage Release	GPS1*/GPS2*	Right	24V 50 Hz	GPAULRAAD	
Undervoltage Release	GPS1*/GPS2*	Right	48V 60 Hz	GPAULRAAF	
Undervoltage Release	GPS1*/GPS2*	Right	48V 50 Hz	GPAULRAAG	
Undervoltage Release	GPS1*/GPS2*	Right	120V 60 Hz, 110-127V 50 Hz	GPAULRAAJ	
Undervoltage Release	GPS1*/GPS2*	Right	208V 60 Hz	GPAULRAAM	
Undervoltage Release	GPS1*/GPS2*	Right	240-260V 60 Hz, 220/230V 50 Hz	GPAULRAAN	
Undervoltage Release	GPS1*/GPS2*	Right	277V 60 Hz, 240V 50 Hz	GPAULRAAR	
Undervoltage Release	GPS1*/GPS2*	Right	380/400V 50 Hz	GPAULRAAU	
Undervoltage Release	GPS1*/GPS2*	Right	460-480V 60 Hz, 415-440V 50 Hz	GPAULRAAW	
Undervoltage Release	GPS1*/GPS2*	Right	600V 60 Hz, 500V 50 Hz	GPAULRAAY	

Provides protection from low voltage conditions; requires 85-110% voltage across D1 and D2 prior to starting motor; requires reset of starter upon undervoltage condition or loss of voltage.



GPAULRAA\_Undervoltage Release

### Side Mounted Accessories—Undervoltage Release

Snap on accessories - maximum of (2) auxiliary contact blocks or (1) shunt trip or (1) undervoltage release right side.

Accessory Type	For Use With	Mounting Position	Coil Voltage	Product Number	GO-10A2C
Undervoltage Release	GPS1BS*	Right	24V 60 Hz	GPAU20LTAAAC	
Undervoltage Release	GPS1BS*	Right	24V 50 Hz	GPAU20LTAAD	
Undervoltage Release	GPS1BS*	Right	48V 60 Hz	GPAU20LTAAF	
Undervoltage Release	GPS1BS*	Right	48V 50 Hz	GPAU20LTAAG	
Undervoltage Release	GPS1BS*	Right	120V 60 Hz, 110-127V 50 Hz	GPAU20LTAAJ	
Undervoltage Release	GPS1BS*	Right	208V 60 Hz	GPAU20LTAAM	
Undervoltage Release	GPS1BS*	Right	240-260V 60 Hz, 220/230V 50 Hz	GPAU20LTAAN	
Undervoltage Release	GPS1BS*	Right	277V 60 Hz, 240V 50 Hz	GPAU20LTAAR	
Undervoltage Release	GPS1BS*	Right	380/400V 50 Hz	GPAU20LTAAU	
Undervoltage Release	GPS1BS*	Right	460-480V 60 Hz, 415-440V 50 Hz	GPAU20LTAAW	
Undervoltage Release	GPS1BS*	Right	600V 60 Hz, 500V 50 Hz	GPAU20LTAAY	

With 2NO early make contacts (provides protection from low voltage conditions; early make contacts energize release coil when operator is turned to ON position and voltage is 85-110% Ve; requires reset of starter upon undervoltage condition or loss of voltage)



GPAU20LTAA\_Undervoltage Release with 2NO early make contacts

### Side Mounted Accessories—Undervoltage Release

Snap on accessories - maximum of (2) auxiliary contact blocks] or (1) shunt trip or (1) undervoltage release right side.

Accessory Type	For Use With	Mounting Position	Coil Voltage	Product Number	GO-10A2C
Undervoltage Release	GPS1BH*/GPS2BH*	Right	24V 60 Hz	GPAU20LCAAC	
Undervoltage Release	GPS1BH*/GPS2BH*	Right	24V 50 Hz	GPAU20LCAAD	
Undervoltage Release	GPS1BH*/GPS2BH*	Right	48V 60 Hz	GPAU20LCAAF	
Undervoltage Release	GPS1BH*/GPS2BH*	Right	48V 50 Hz	GPAU20LCAAG	
Undervoltage Release	GPS1BH*/GPS2BH*	Right	120V 60 Hz, 110-127V 50 Hz	GPAU20LCAAJ	
Undervoltage Release	GPS1BH*/GPS2BH*	Right	208V 60 Hz	GPAU20LCAAM	
Undervoltage Release	GPS1BH*/GPS2BH*	Right	240-260V 60 Hz, 220/230V 50 Hz	GPAU20LCAAN	
Undervoltage Release	GPS1BH*/GPS2BH*	Right	277V 60 Hz, 240V 50 Hz	GPAU20LCAAR	
Undervoltage Release	GPS1BH*/GPS2BH*	Right	380/400V 50 Hz	GPAU20LCAAU	
Undervoltage Release	GPS1BH*/GPS2BH*	Right	460-480V 60 Hz, 415-440V 50 Hz	GPAU20LCAAW	
Undervoltage Release	GPS1BH*/GPS2BH*	Right	600V 60 Hz, 500V 50 Hz	GPAU20LCAAY	

With 2NO early make contacts (provides protection from low voltage conditions; early make contacts energize release coil when operator is turned to ON position and voltage is 85-110% Ve; requires reset of starter upon undervoltage condition or loss of voltage)



GPAU20LCAA\_Undervoltage Release with 2NO early make contacts



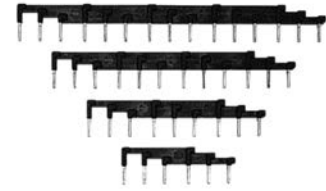
# IEC Manual Motor Starters Accessories

## Section 6

### Group Mounted Starter Accessories

Accessory Type	For Use With	Maximum Amps	Spacing	Product Description	Terminal Type	No. of Controllers	Product Number	GO-10A2C
Input Busbar	GPS1*	63A max.	45mm	Used with no auxiliaries	Pin	2	GPB1B02A	
Input Busbar	GPS1*	63A max.	45mm	Used with no auxiliaries	Pin	3	GPB1B03A	
Input Busbar	GPS1*	63A max.	45mm	Used with no auxiliaries	Pin	4	GPB1B04A	
Input Busbar	GPS1*	63A max.	45mm	Used with no auxiliaries	Pin	5	GPB1B05A	
Input Busbar	GPS1*	63A max.	54mm	Used with 1 aux or 1 aux alarm (one 9mm auxiliary)	Pin	2	GPB1B12A	
Input Busbar	GPS1*	63A max.	54mm	Used with 1 aux or 1 aux alarm (one 9mm auxiliary)	Pin	3	GPB1B13A	
Input Busbar	GPS1*	63A max.	54mm	Used with 1 aux or 1 aux alarm (one 9mm auxiliary)	Pin	4	GPB1B14A	
Input Busbar	GPS1*	63A max.	54mm	Used with 1 aux or 1 aux alarm (one 9mm auxiliary)	Pin	5	GPB1B15A	
Input Busbar	GPS1*	63A max.	63mm	Used with 2 aux or 1 aux+1 aux/alarm or shunt or UV (two 9mm auxiliaries or one 18mm auxiliary)	Fork	2	GPB1B22A	
Input Busbar	GPS1*	63A max.	63mm	Used with 2 aux or 1 aux+1 aux/alarm or shunt or UV (two 9mm auxiliaries or one 18mm auxiliary)	Fork	4	GPB1B24A	
Input Busbar	GPS2*	120A max.	55mm	Used with no auxiliaries	Pin	2	GPB2B02A	
Input Busbar	GPS2*	120A max.	55mm	Used with no auxiliaries	Pin	3	GPB2B03A	
Input Busbar	GPS2*	120A max.	55mm	Used with no auxiliaries	Pin	4	GPB2B04A	
Input Busbar	GPS2*	120A max.	64mm	Used with 1 aux or 1 aux alarm (one 9mm auxiliary)	Pin	2	GPB2B12A	
Input Busbar	GPS2*	120A max.	64mm	Used with 1 aux or 1 aux alarm (one 9mm auxiliary)	Pin	3	GPB2B13A	
Input Busbar	GPS2*	120A max.	64mm	Used with 1 aux or 1 aux alarm (one 9mm auxiliary)	Pin	4	GPB2B14A	
Input Busbar	GPS2*	120A max.	73mm	Used with 2 aux or 1 aux + aux/alarm or shunt or UV (two 9mm auxiliaries or one 18mm auxiliary)	Pin	2	GPB2B22A	
Input Busbar	GPS2*	120A max.	73mm	Used with 2 aux or 1 aux + aux/alarm or shunt or UV (two 9mm auxiliaries or one 18mm auxiliary)	Pin	4	GPB2B24A	
Power Input Busbar Terminal	GPS1*	63A max.		Used with GP1B busbars above Wire size - AWG 10-4 Torque - 38 lbs.-in.	Pozidrive		GPB1FA	
Power Input Busbar Terminal	GPS2*	120A max.		Used with GPB2 busbars above Wire Size - AWG 8 - 1/0 Torque - 54 lbs. in.	Allen Screw		GPB2FA	
Terminal Covers	GPS1*			Slips over unused GPB1B0__ (45mm) or GPB1B1__ (54mm) pin type input busbar terminals to provide touch protection			GPB1GA	
Terminal Covers	GPS2*			Snaps over unused GPB2B0__ (55mm) or GPB2B1__ (64mm) pin type busbar terminals to provide touch protection			GPB2GA	

Input Busbar simplifies group installations; different forms accommodate different accessories.



GPB\_B\_\_\_Input Busbar



GPB\_FA Power Input Busbar Terminal



GPB\_GA Terminal Cover



# IEC Manual Motor Starters Accessories

## External Handle Operators

Allows operation of GPS1BH\_\_ and GPS2BH\_\_ starters through a panel door. Shaft mounting depth inside the panel can range from 5.5" - 11.4" (139.8 - 289.8 mm) for GPS1BH\_\_ and 6.3" - 12.25" (161 - 311 mm) for GPS2BH\_\_.

For Use With	Handle Type	Product Number
GPS1*	Black	GPA1HAB
GPS1*	Red/Yellow	GPA1HAR
GPS2*	Black	GPA2HAB
GPS2*	Red/Yellow	GPA2HAR



GPA\_HA\_Handle Operator

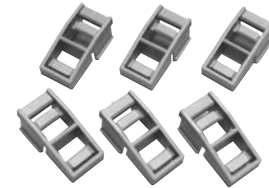
## Other Accessories

Accessory Type	For Use With	Description	Product Number	GO-10A2C
Snap-in Tabs	GPS1*	For Screw Mounting GPS1 to panel <sup>1</sup>	GPAKS1A	
Terminal Covers	GPS2*	IP20 (package of 6)	GPAPT2A	
Terminal Covers	GPS1BH*	Additional protective cover required for combination control. Easily suited for field installation. May not use front mounted internal accessories with cover in place. Cannot use GPB1 busbars with protective cover.	GPAPT1E	

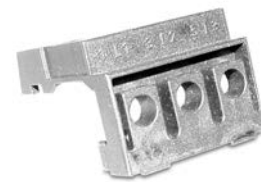
<sup>1</sup>Packaged in quantities of 10.



GPAKS1A Snap-in Tabs



GPAPT2A Terminal Covers for GPS2\*



GPAPT1E Terminal Covers for GPS1BH\*



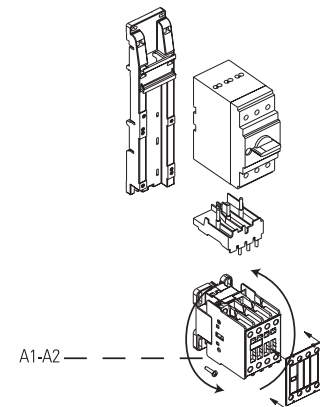
# IEC Manual Motor Starters

## Accessories

## Section 6

### Integrated Starter Components

Accessory Type	For Use With	Contactors Prefix	Coil Volts	Product Number	GO-10A2C
Bases	GPS1*	MC0/MC1 (optional), CL00, 01, 02, 25 (optional), CL00, 01, 02, 25	AC or DC AC DC	GPF1B1A	
Bases	GPS1*	CL04	AC or DC	GPF1B4A	
Bases	GPS2*	CL04, CL45	AC or DC	GPF2B2A	
Bases	GPS2*	CL06, CL07	AC	GPF2B3A	
Links	GPS1*	MC0/MC1	AC & DC	GPF1LMCBA	
Links	GPS1*	CL00, CL01, CL02	AC	GPF1L02AA	
Links	GPS1*	CL00, CL01, CL02	DC	GPF1L02DA	
Links	GPS1*	CL25	AC	GPF1L25AA	
Links	GPS1*	CL25	DC	GPF1L25DA	
Links	GPS1*	CL04	AC	GPF1L04AA	
Links	GPS1*	CL04	DC	GPF1L04DA	
Links	GPS2*	CL04	AC	GPF2L04AA	
Links	GPS2*	CL04	DC	GPF2L04DA	
Links	GPS2*	CL45	AC	GPF2L45AA	
Links	GPS2*	CL45	DC	GPF2L45DA	
Links	GPS2*	CL06, CL07	AC	GPF2L07AA	



Integrated Starter Components

### Integrated Starter Components

For integrated starter applications, rotate CL contactors 180°, coil terminals down. This permits direct access to the A1-A2 coil terminals when contactors are assembled to the manual motor starter. Then attach the plastic cover to the front of the contactor so that terminal numbering is in the correct position. Note: After 180° rotation, the built-in auxiliary contact on CL00 \_\_, CL01 \_\_, CL02 \_\_ and CL04 \_\_ will be located on the first terminal on the left side.

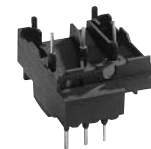
Accessory Type	Contactors Prefix	Built-In Aux Contacts	Product Number
Covers	CL00, CL01, CL02	1NO	GPF10C02 <sup>1</sup>
Covers	CL00, CL01, CL02	1NC	GPF01C02 <sup>1</sup>
Covers	CL25	None	GPF00C25 <sup>1</sup>
Covers	CL04	1NO	GPF10C04 <sup>2</sup>
Covers	CL04	1NC	GPF01C04 <sup>2</sup>
Covers	CL45	None	GPF00C45 <sup>2</sup>
Covers	CL06, CL07 (AC Only)	None	GPF00C08 <sup>2</sup>

<sup>1</sup>Covers accommodate a maximum of 2 front auxiliary contact blocks.

<sup>2</sup>Covers accommodate a maximum of 4 front auxiliary contact blocks.



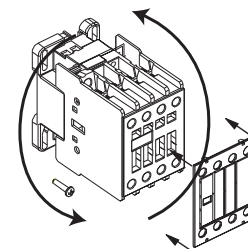
GPF\_B\_A Bases



GPF1L\_\_\_/GPF2L\_\_\_ Links



Cover



Rotate CL contactors 180 degrees



# IEC Manual Motor Starters Accessories

## Integrated Starter Components

Accessory Type	For Use With	Contactors Prefix	Coil Volts	Product Number	GO-10A2C
Wiring Kits for Reversing Starters	GPS1*	MC0/MC1	AC or DC	WKMIU	
Wiring Kits for Reversing Starters	GPS1*	CL00, CL01, CL02	AC or DC	WKLI02P	
Wiring Kits for Reversing Starters	GPS1*	CL25	AC or DC	WKLI25P	
Wiring Kits for Reversing Starters	GPS1*/GPS2*	CL04	AC or DC	WKLI04P	
Wiring Kits for Reversing Starters	GPS2*	CL45	AC or DC	WKLI45P	
Wiring Kits for Reversing Starters	GPS2*	CL06, CL07	AC	CLXC41	

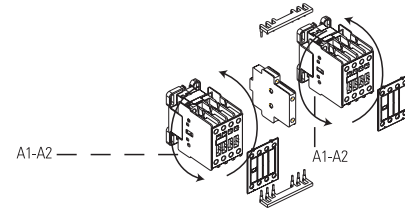
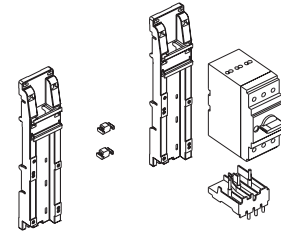
## Integrated Starter Components

Bases and base links are required for reversers using CL contactors, optional for reversers using MC contactors. Two base links are required for each pair of reverser bases.

Accessory Type	For Use With	Product Number
Base Links for Reversers	GPS1*	GPF1CBA

Product number represents package of 2.

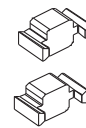
## Section 6



Integrated Starter Components



WKLI\_ \_Wiring Kits for Reversing Starters



Base Links for Reversers

