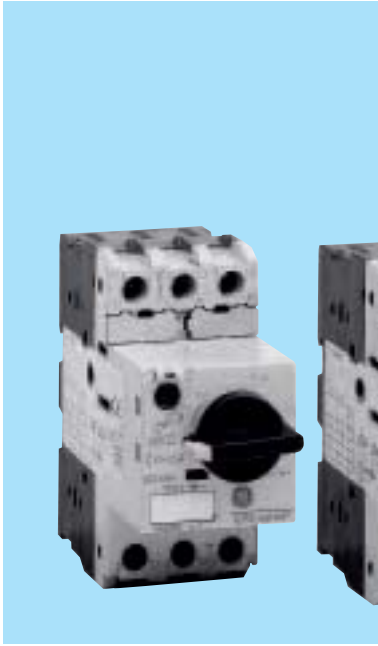


Thermal and magnetic protection

GPS1B



Standards/Approvals

IEC 60947-1, 60947-2, 60947-4-1
 DIN VDE 0660T 100/101/102
 UL508/CSA - UL508/cULus
 Shipping approvals:



RINA



Bureau Veritas



Lloyd's Register
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cULus

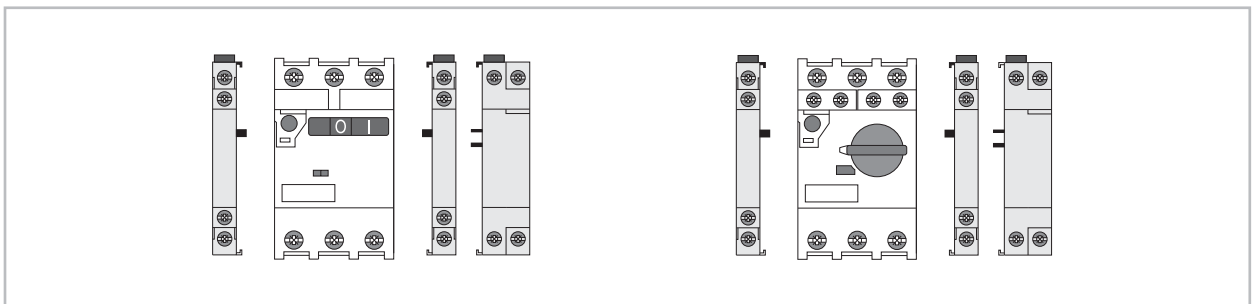


CE

Characteristics

- Rocker and rotary handle operator
- Thermal and magnetic protection
- Standard and high breaking capacity
 $I_{cu} = 100kA \geq I_{cs} = 100\% I_{cu}$
 $I_{cu} < 100kA \geq I_{cs} \text{ min. } 75\% I_{cu}$
- Clear identification of the operation state (ON-OFF-tripped)
- Ambient temperature compensation
- Phase failure protection

Auxiliaries



Technical performances

Rated current I_n	(A)	0.1-32
Rated operational current I_e (A)		0.1-32
Rated power at 400Vac	(kW)	0.02-15
Utilisation category		
IEC 60947-2 (circuit breaker)		A
IEC 60947-4-1 (MMS)		AC-3
Tripping class IEC 60947-4-1		10
Magnetic release $I_e \text{ max.}$	(A)	$\times 13$
Mechanical/electrical endurance		100,000

Accessories

- Auxiliaries ● pg. B.16
- Busbar system ● pg. B.19

- Technical data ● pg. B.22
- Dimensions ● pg. B.28
- Fuseless starters ● pg. D.2
- Coordination tables ● pg. D.5

GPS1B - Standard breaking capacity

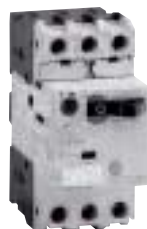
CLASS 10	Rated power 3 phase motors at 400Vac Pn	Rated current In (1)	Thermal current setting range	Instantaneous short-circuit release	Rated ultimate short-circuit breaking capacity at 400V Icu (kA)	Rated service short-circuit breaking capacity at 400V Ics (kA)	Cat. no.	Ref. no.	Pack.
	(kW)	(A)	(A)	(A)					
	0.02	0.16	0.1 - 0.16	2.1	100	100	GPS1BSAA	101211	5
	0.06	0.25	0.16 - 0.25	3.3	100	100	GPS1BSAB	101212	5
	0.09	0.4	0.25 - 0.4	5.2	100	100	GPS1BSAC	101213	5
	0.12/0.18	0.63	0.4 - 0.63	8.2	100	100	GPS1BSAD	101214	5
	0.25	1	0.63 - 1	13	100	100	GPS1BSAE	101215	5
	0.37/0.55	1.6	1 - 1.6	20.8	100	100	GPS1BSAF	101216	5
	0.75	2.5	1.6 - 2.5	32.5	100	100	GPS1BSAG	101217	5
	1.5	4	2.5 - 4	52	100	100	GPS1BSAH	101218	5
	2.2	6.3	4 - 6.3	81.9	100	100	GPS1BSAJ	101219	5
	3/4	10	6.3 - 10	130	100	100	GPS1BSAK	101220	5
	5.5	13	9 - 13	169	50	38	GPS1BSAL	101221	5
	7.5	16	11 - 16	208	25	19	GPS1BSAM	101222	5
	10	20	14 - 20	260	25	19	GPS1BSAN	101223	5
	11	25	19 - 25	325	25	19	GPS1BSAP	101224	5
	15	32	24 - 32	416	25	19	GPS1BSAR	101225	5
	0.02	0.16	0.1 - 0.16	2.1	100	100	GPS1BSAAMP	101195	40
	0.06	0.25	0.16 - 0.25	3.3	100	100	GPS1BSABMP	101196	40
	0.09	0.4	0.25 - 0.4	5.2	100	100	GPS1BSACMP	101197	40
	0.12/0.18	0.63	0.4 - 0.63	8.2	100	100	GPS1BSADMP	101198	40
	0.25	1	0.63 - 1	13	100	100	GPS1BSAEMP	101199	40
	0.37/0.55	1.6	1 - 1.6	20.8	100	100	GPS1BSAFMP	101200	40
	0.75	2.5	1.6 - 2.5	32.5	100	100	GPS1BSAGMP	101201	40
	1.5	4	2.5 - 4	52	100	100	GPS1BSAHMP	101202	40
	2.2	6.3	4 - 6.3	81.9	100	100	GPS1BSAJMP	101203	40
	3/4	10	6.3 - 10	130	100	100	GPS1BSAKMP	101204	40
	5.5	13	9 - 13	169	50	38	GPS1BSALMP	101205	40
	7.5	16	11 - 16	208	25	19	GPS1BSAMMP	101206	40
	10	20	14 - 20	260	25	19	GPS1BSANMP	101207	40
	11	25	19 - 25	325	25	19	GPS1BSAPMP	101208	40
	15	32	24 - 32	416	25	19	GPS1BSARMP	101209	40

(1) Rated current: highest thermal current setting range value.

GPS1B - High breaking capacity.

CLASS 10	Rated power 3 phase motors at 400Vac Pn	Rated current In (1)	Thermal current setting range	Instantaneous short-circuit release	Rated ultimate short-circuit breaking capacity at 400V Icu (kA)	Rated service short-circuit breaking capacity at 400V Ics (kA)	Cat. no.	Ref. no.	Pack.
	(kW)	(A)	(A)	(A)					
	0.02	0.16	0.1 - 0.16	2.1	100	100	GPS1BHAA	101234	5
	0.06	0.25	0.16 - 0.25	3.3	100	100	GPS1BHAB	101235	5
	0.09	0.4	0.25 - 0.4	5.2	100	100	GPS1BHAC	101236	5
	0.12/0.18	0.63	0.4 - 0.63	8.2	100	100	GPS1BHAD	101237	5
	0.25	1	0.63 - 1	13	100	100	GPS1BHA E	101238	5
	0.37/0.55	1.6	1 - 1.6	20.8	100	100	GPS1BHAF	101239	5
	0.75	2.5	1.6 - 2.5	32.5	100	100	GPS1BHAG	101240	5
	1.5	4	2.5 - 4	52	100	100	GPS1BHAH	101241	5
	2.2	6.3	4 - 6.3	81.9	100	100	GPS1BHAJ	101242	5
	3/4	10	6.3 - 10	130	100	100	GPS1BHAK	101243	5
	5.5	13	9 - 13	169	100	100	GPS1BHAL	101244	5
	7.5	16	11 - 16	208	50	38	GPS1BHAM	101245	5
	10	20	14 - 20	260	50	38	GPS1BHAN	101246	5
	11	25	19 - 25	325	50	38	GPS1BHAP	101247	5
	15	32	24 - 32	416	50	38	GPS1BHAR	101248	5

(1) Rated current: highest thermal current setting range value.



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Thermal and magnetic protection

GPS2B



Standards/Approvals

IEC 60947-1, 60947-2, 60947-4-1
 DIN VDE 0660T 100/101/102
 UL508/CSA - UL508/cULus
 Shipping approvals:



RINA



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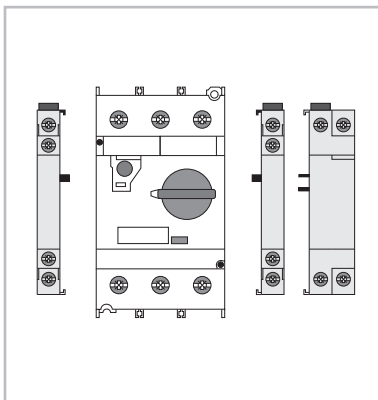


cULus



CE

Auxiliaries



Accessories

- Auxiliaries ● pg. B.16
- Busbar system ● pg. B.19

- Technical data ● pg. B.22
- Dimensions ● pg. B.28
- Fuseless starters ● pg. D.2
- Coordination tables ● pg. D.5

Characteristics

- Rotary handle operator
- Thermal and magnetic protection
- Standard and high breaking capacity
 - Icu = 100kA ≥ Ics = 100% Icu
 - Icu < 100kA ≥ Ics min. 75% Icu
- Clear identification of the operation state (ON-OFF-tripped)
- Ambient temperature compensation
- Phase failure protection

Technical performances

Rated current I_n	(A)	10-63
Rated operational current I_e	(A)	10-63
Rated power at 400Vac	(kW)	4-30
Utilisation category		
IEC 60947-2 (circuit breaker)		A
IEC 60947-4-1 (MMS)		AC-3
Tripping class IEC 60947-4-1		10
Magnetic release I_e max.	(A)	×13
Mechanical/electrical endurance		50,000/25,000

GPS2B - Standard breaking capacity

CLASS 10	Rated power 3 phase motors at 400Vac Pn	Rated current In (1)	Thermal current setting range	Instantaneous short-circuit release	Rated ultimate short-circuit breaking capacity at 400V Icu (kA)	Rated service short-circuit breaking capacity at 400V Ics (kA)	Cat. no.	Ref. no.	Pack.
	(kW)	(A)	(A)	(A)					
	3/4	10	6.3 - 10	130	100	100	GPS2BSAK	101226	1
5.5	13	9 - 13	169	50	38	GPS2BSAL	107119	1	
7.5	16	11 - 16	208	25	19	GPS2BSAM	101227	1	
10	20	14 - 20	260	25	19	GPS2BSAN	101228	1	
11	25	19 - 25	325	25	19	GPS2BSAP	101229	1	
15	32	24 - 32	416	25	19	GPS2BSAR	101230	1	
18.5	40	28 - 40	520	25	19	GPS2BSAS	101231	1	
22	50	35 - 50	650	25	19	GPS2BSAT	101232	1	
30	63	45 - 63	819	25	19	GPS2BSAU	101233	1	



(1) Rated current: highest thermal current setting range value.

GPS2B - High breaking capacity

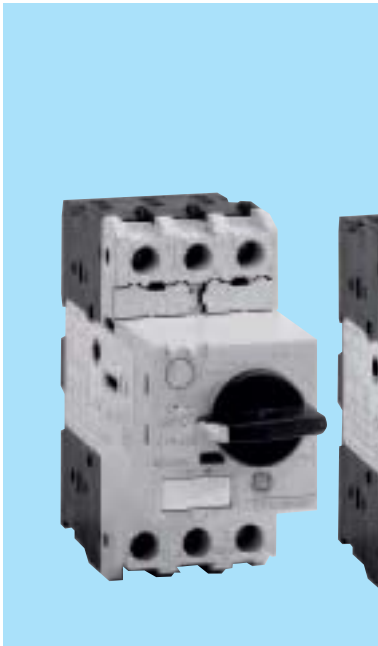
CLASS 10	Rated power 3 phase motors at 400Vac Pn	Rated current In (1)	Thermal current setting range	Instantaneous short-circuit release	Short-circuit breaking capacity at 400V Icu (kA)	Short-circuit breaking capacity at 400V Ics (kA)	Cat. no.	Ref. no.	Pack.
	(kW)	(A)	(A)	(A)					
	3/4	10	6.3 - 10	130	100	100	GPS2BHAK	101249	1
5.5	13	9 - 13	169	100	100	GPS2BHAL	107120	1	
7.5	16	11 - 16	208	50	38	GPS2BHAM	101250	1	
10	20	14 - 20	260	50	38	GPS2BHAN	101251	1	
11	25	19 - 25	325	50	38	GPS2BHAP	101252	1	
15	32	24 - 32	416	50	38	GPS2BHAR	101253	1	
18.5	40	28 - 40	520	50	38	GPS2BHAS	101254	1	
22	50	35 - 50	650	50	38	GPS2BHAT	101255	1	
30	63	45 - 63	819	50	38	GPS2BHAU	101256	1	



(1) Rated current: highest thermal current setting range value.

Magnetic protection

GPS1M



Standards/Approvals

IEC 60947-1, 60947-2, 60947-4-1
 DIN VDE 0660T 100/101/102
 UL508/CSA - UL508/cULus
 Shipping approvals:



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cULus

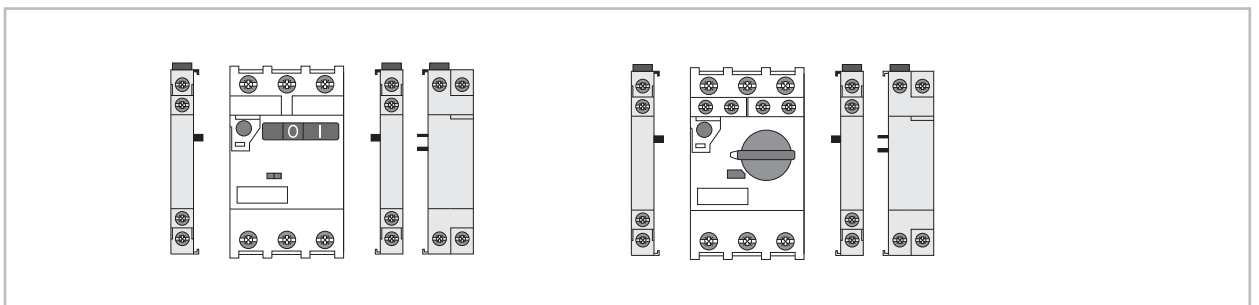


CE

Characteristics

- Short-circuit protection for starters
- Rocker and rotary handle operator
- Magnetic protection
- Standard and high breaking capacity
 $I_{cu} = 100kA \geq I_{cs} = 100\% I_{cu}$
 $I_{cu} < 100kA \geq I_{cs} \text{ min. } 75\% I_{cu}$
- Clear identification of the operation state (ON-OFF-tripped)

Auxiliaries



Accessories

- Auxiliaries ● pg. B.16
- Busbar system ● pg. B.19

- Technical data ● pg. B.22
- Dimensions ● pg. B.28
- Fuseless starters ● pg. D.2
- Coordination tables ● pg. D.5

Technical performances

Rated current I_n	(A) 0.1-32
Rated operational current I_e	(A) 0.1-32
Utilisation category	A
IEC 60947-2 (circuit breaker)	
Magnetic release $I_e \text{ max.}$	(A) $\times 13$
Mechanical/electrical endurance	100.000

GPS1M - Standard breaking capacity



Rated power 3 phase motors at 400Vac Pn (kW)	Rated current In (A)	Thermal current setting range (1) (A)	Instantaneous short-circuit release (A)	Rated ultimate short-circuit breaking capacity at 400V Icu (kA)	Rated service short-circuit breaking capacity at 400V Ics (kA)	Cat. no.	Ref. no.	Pack.
0.02	0.16	-	2.1	100	100	GPS1MSAA	101257	5
0.06	0.25	-	3.3	100	100	GPS1MSAB	101258	5
0.09	0.4	-	5.2	100	100	GPS1MSAC	101259	5
0.12/0.18	0.63	-	8.2	100	100	GPS1MSAD	101260	5
0.25	1	-	13	100	100	GPS1MSAE	101261	5
0.37/0.55	1.6	-	20.8	100	100	GPS1MSAF	101262	5
0.75	2.5	-	32.5	100	100	GPS1MSAG	101263	5
1.5	4	-	52	100	100	GPS1MSAH	101264	5
2.2	6.3	-	81.9	100	100	GPS1MSAJ	101265	5
3/4	10	-	130	100	100	GPS1MSAK	101266	5
5.5	13	-	169	50	38	GPS1MSAL	101267	5
7.5	16	-	208	25	19	GPS1MSAM	101268	5
10	20	-	260	25	19	GPS1MSAN	101269	5
11	25	-	325	25	19	GPS1MSAP	101270	5
15	32	-	416	25	19	GPS1MSAR	101271	5

(1) Select appropriate thermal overload relay for the starter. See chapter C pages C.62 - C.68.

GPS1M - High breaking capacity



Rated power 3 phase motors at 400Vac Pn (kW)	Rated current In (A)	Thermal current setting range (1) (A)	Instantaneous short-circuit release (A)	Rated ultimate short-circuit breaking capacity at 400V Icu (kA)	Rated service short-circuit breaking capacity at 400V Ics (kA)	Cat. no.	Ref. no.	Pack.
0.02	0.16	-	2.1	100	100	GPS1MHAA	101280	5
0.06	0.25	-	3.3	100	100	GPS1MHAB	101281	5
0.09	0.4	-	5.2	100	100	GPS1MHAC	101282	5
0.12/0.18	0.63	-	8.2	100	100	GPS1MHAD	101283	5
0.25	1	-	13	100	100	GPS1MHAE	101284	5
0.37/0.55	1.6	-	20.8	100	100	GPS1MHAF	101285	5
0.75	2.5	-	32.5	100	100	GPS1MHAG	101286	5
1.5	4	-	52	100	100	GPS1MHAH	101287	5
2.2	6.3	-	81.9	100	100	GPS1MHAJ	101288	5
3/4	10	-	130	100	100	GPS1MHAK	101289	5
5.5	13	-	169	100	100	GPS1MHAL	101290	5
7.5	16	-	208	50	38	GPS1MHAM	101291	5
10	20	-	260	50	38	GPS1MHAN	101292	5
11	25	-	325	50	38	GPS1MHAP	101293	5
15	32	-	416	50	38	GPS1MHAR	101294	5

(1) Select appropriate thermal overload relay for the starter. See chapter C pages C.62 - C.68.

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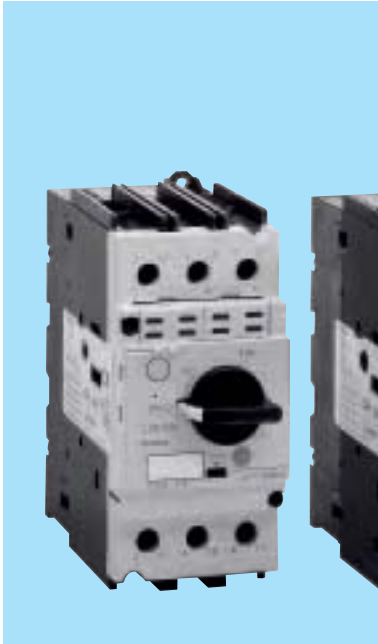
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Magnetic protection

GPS2M



Standards/Approvals

IEC 60947-1, 60947-2, 60947-4-1
 DIN VDE 0660T 100/101/102
 UL508/CSA - UL508/cULus
 Shipping approvals:



RINA



Bureau Veritas

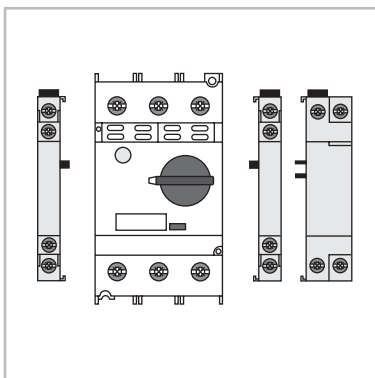


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CE

Auxiliaries



Accessories

- Auxiliaries ● pg. B.16
- Busbar system ● pg. B.19

- Technical data ● pg. B.22
- Dimensions ● pg. B.28
- Fuseless starters ● pg. D.2
- Coordination tables ● pg. D.5

Characteristics

- Short-circuit protection for starters
- Rotary handle operator
- Magnetic protection
- Standard and high breaking capacity
 - $I_{cu} = 100kA \geq I_{cs} = 100\% I_{cu}$
 - $I_{cu} < 100kA \geq I_{cs} \text{ min. } 75\% I_{cu}$
- Clear identification of the operation state (ON-OFF-tripped)

Technical performances

Rated current I_n	(A) 10-63
Rated operational current I_e	(A) 10-63
Utilisation category	A
IEC 60947-2 (circuit breaker)	
Magnetic release $I_e \text{ max.}$	(A) x13
Mechanical/electrical endurance	50,000/25,000

GPS2M - Standard breaking capacity



Rated power 3 phase motors at 400Vac Pn	Rated current In	Thermal current setting range (1)	Instantaneous short-circuit release	Rated ultimate short-circuit breaking capacity at 400V Icu (kA)	Rated service short-circuit breaking capacity at 400V Ics (kA)	Cat. no.	Ref. no.	Pack.
(kW)	(A)	(A)	(A)					
4	10	-	130	100	100	GPS2MSAK	101272	1
5.5	13	-	169	50	38	GPS2MSAL	107121	1
7.5	16	-	208	25	19	GPS2MSAM	101273	1
10	20	-	260	25	19	GPS2MSAN	101274	1
11	25	-	325	25	19	GPS2MSAP	101275	1
15	32	-	416	25	19	GPS2MSAR	101276	1
18.5	40	-	520	25	19	GPS2MSAS	101277	1
22	50	-	650	25	19	GPS2MSAT	101278	1
30	63	-	819	25	19	GPS2MSAU	101279	1

(1) Select appropriate thermal overload relay for the starter. See chapter C pages C.64 - C.68.

GPS2M - High breaking capacity



Rated power 3 phase motors at 400Vac Pn	Rated current In	Thermal current setting range (1)	Instantaneous short-circuit release	Rated ultimate short-circuit breaking capacity at 400V Icu (kA)	Rated service short-circuit breaking capacity at 400V Ics (kA)	Cat. no.	Ref. no.	Pack.
(kW)	(A)	(A)	(A)					
4	10	-	130	100	100	GPS2MHAK	101295	1
5.5	13	-	169	100	100	GPS2MHAL	107122	1
7.5	16	-	208	50	38	GPS2MHAM	101296	1
10	20	-	260	50	38	GPS2MHAN	101297	1
11	25	-	325	50	38	GPS2MHAP	101298	1
15	32	-	416	50	38	GPS2MHAR	101299	1
18.5	40	-	520	50	38	GPS2MHAS	101300	1
22	50	-	650	50	38	GPS2MHAT	101301	1
30	63	-	819	50	38	GPS2MHAU	101302	1

(1) Select appropriate thermal overload relay for the starter. See chapter C pages C.63 - C.68.

Technical data

General data

Frame size	GPS1	GPS2
Rated insulation voltage U _i	690V	1000V
Rated operating voltage U _e	690V ac	690V ac
Rated impulse withstand strength U _{imp}	6kV	8kV
Rated frequency	50/60Hz	50/60Hz
Total power loss P (W)	0.16 to 25A 7W 32A 8.5W	up to 32A 11W 40A to 50A 15W 63A 17W
Utilisation category:		
IEC 947-2 (Circuit breaker)	Cat. A	Cat. A
IEC 947-4-1 (Motor starter)	AC3	AC3
Mechanical operational performance	100,000 (70,000 for 32A)	50,000
Electrical operational performance	100,000 (70,000 for 32A)	25,000
Max. operations per hour (motor start-up)	25	25
Ambient conditions:		
Storage temperature	-40°C to +80°C	-40°C to +80°C
Operation temperature	-25°C to +60°C	-25°C to +60°C
Temperature compensation	-20°C to +60°C	-20°C to +60°C
Ambient temperature compensation	yes	yes
Operational altitude	up to 2000m	up to 2000m
Shock resistance (IEC 68)	30g (width 20ms)	30g (width 20ms)
Vibration resistance	8g (5 to 150Hz)	8g (5 to 150Hz)
Shock-hazard prot. (acc. DIN VDE 0106)	fingerproof	fingerproof
Protection degree (acc. to IEC529)	IP20	IP10 (IP20 with acc. GPAPT2A)
Rated current I _e	up to 32A	up to 63A
Overload protection	IEC 947-4-1	IEC 947-4-1
Phase failure protection	yes	yes
Tripping class	10	10
Magnetic release (factory set)	13 x I _{emax}	13 x I _{emax}
Test trip button	yes	yes
Standards & Approvals		
IEC 947-1 / -2 / -4-1	yes	yes
DIN VDE 0660T 100 / 101 / 102	yes	yes
UL508	yes	yes
UL508 type E	Only GPS1*H	yes
CE	yes	yes
cULus	yes	yes
D / S / N / Fi	In process	-
Shipping approvals	yes	yes

Mounting data

Terminal capacity:		
Solid or stranded without end sleeve	1 x 1...10 mm ² 2 x 1...6 mm ²	1 or 2 x 1...25 mm ²
Stranded with end sleeve	1 or 2 x 1...6 mm ²	1 x 1...25 mm ² / 2 x 1...16 mm ²
AWG	1 x 18...8 / 2 x 18...10	1 x 18...2 / 2 x 18...4
Operating mechanism lockable in OFF position diameter (mm)	3.5 to 4.5	3.5 to 4.5
Terminal type	screw	box
Tightening torque	2 Nm / 18Lb.in	5 Nm / 45 Lb.in
Screwdriver	Pz2 / slotted combination	Pz2 / slotted combination
Mounting:		
DIN-rail	yes	yes
Screws	no	yes
Operating position:		
turning to the front	30°	30°
turning to the back	90°	90°
turning to both sides	180°	180°
Handle operation	Rocker level / Rotary	Rotary
Dimensions		
width (mm)	45	55
height (mm)	90	120
depth (mm)	(GPS1*S) 75 / 92.5 (GPS1*H)	107.5



Ultimate short-circuit breaking capacity (Icu) in kA

		For ranges GPS1BSA* / GPS1MSA*																	
		A	B	C	D	E	F	G	H	J	K	L	M	N	P	R	S	T	U
Rated current (A)		1.6	0.25	0.4	0.63	1	1.6	2.5	4	6.3	10	13	16	20	25	32	40	50	63
220/230V		100	100	100	100	100	100	100	100	100	100	100	100	50	50	50	-	-	-
400/415V		100	100	100	100	100	100	100	100	100	100	50	25	25	25	25	-	-	-
440V		100	100	100	100	100	100	100	100	50	15	10	10	10	10	10	-	-	-
500/525V		100	100	100	100	100	100	100	100	50	10	6	6	6	6	6	-	-	-
600V		100	100	100	100	100	100	3	3	3	3	3	3	3	3	3	-	-	-
690V		100	100	100	100	100	100	3	3	3	3	3	3	3	3	3	-	-	-
		For ranges GPS1BHA* / GPS1MHA*																	
220/230V		100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	-	-	-
400/415V		100	100	100	100	100	100	100	100	100	100	50	50	50	50	50	-	-	-
440V		100	100	100	100	100	100	100	100	100	50	50	35	35	35	35	-	-	-
500/525V		100	100	100	100	100	100	100	100	100	50	42	10	10	10	10	-	-	-
600V		100	100	100	100	100	100	8	8	6	6	6	4	4	4	4	-	-	-
690V		100	100	100	100	100	100	8	8	6	6	6	4	4	4	4	-	-	-
		For ranges GPS2BSA* / GPS2MSA*																	
220/230V		-	-	-	-	-	-	-	-	-	100	100	100	50	50	50	50	50	50
400/415V		-	-	-	-	-	-	-	-	-	100	50	25	25	25	25	25	25	25
440V		-	-	-	-	-	-	-	-	-	15	10	10	10	10	10	10	10	10
500/525V		-	-	-	-	-	-	-	-	-	10	6	6	6	6	6	5	5	5
600V		-	-	-	-	-	-	-	-	-	4	4	4	4	4	4	4	4	4
690V		-	-	-	-	-	-	-	-	-	4	4	4	4	4	4	4	4	4
		For ranges GPS2BHA* / GPS2MHA*																	
220/230V		-	-	-	-	-	-	-	-	-	100	100	100	100	100	100	100	100	100
400/415V		-	-	-	-	-	-	-	-	-	100	100	50	50	50	50	50	50	50
440V		-	-	-	-	-	-	-	-	-	50	50	50	50	35	35	35	35	35
500/525V		-	-	-	-	-	-	-	-	-	50	42	12	12	12	10	10	10	10
600V		-	-	-	-	-	-	-	-	-	6	6	5	5	5	5	5	5	5
690V		-	-	-	-	-	-	-	-	-	6	6	5	5	5	5	5	5	5

Short-circuit proof with an Icu = 100kA or 50kA

Rated service short-circuit breaking capacity (Ics) in kA

		For ranges GPS1BSA* / GPS1MSA*																	
		A	B	C	D	E	F	G	H	J	K	L	M	N	P	R	S	T	U
Rated current (A)		1.6	0.25	0.4	0.63	1	1.6	2.5	4	6.3	10	13	16	20	25	32	40	50	63
220/230V		100	100	100	100	100	100	100	100	100	100	100	100	38	38	38	-	-	-
400/415V		100	100	100	100	100	100	100	100	100	100	38	19	19	19	19	-	-	-
440V		100	100	100	100	100	100	100	100	38	11	8	8	8	8	8	-	-	-
500/525V		100	100	100	100	100	100	100	100	38	8	5	5	5	5	5	-	-	-
600V		100	100	100	100	100	100	3	3	3	3	3	3	3	3	3	-	-	-
690V		100	100	100	100	100	100	3	3	3	3	3	3	3	3	3	-	-	-
		For ranges GPS1BHA* / GPS1MHA*																	
220/230V		100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	-	-	-
400/415V		100	100	100	100	100	100	100	100	100	100	38	38	38	38	38	-	-	-
440V		100	100	100	100	100	100	100	100	100	38	38	25	25	25	25	-	-	-
500/525V		100	100	100	100	100	100	100	100	100	38	32	8	8	8	8	-	-	-
600V		100	100	100	100	100	100	6	6	5	5	5	3	3	3	3	-	-	-
690V		100	100	100	100	100	100	6	6	5	5	5	3	3	3	3	-	-	-
		For ranges GPS2BSA* / GPS2MSA*																	
220/230V		-	-	-	-	-	-	-	-	-	100	100	100	38	38	38	38	38	38
400/415V		-	-	-	-	-	-	-	-	-	100	32	19	19	19	19	19	19	19
440V		-	-	-	-	-	-	-	-	-	12	8	8	8	8	8	8	8	8
500/525V		-	-	-	-	-	-	-	-	-	8	5	5	5	5	5	4	4	4
600V		-	-	-	-	-	-	-	-	-	3	3	3	3	3	3	3	3	3
690V		-	-	-	-	-	-	-	-	-	3	3	3	3	3	3	3	3	3
		For ranges GPS2BHA* / GPS2MHA*																	
220/230V		-	-	-	-	-	-	-	-	-	100	100	100	100	100	100	100	100	100
400/415V		-	-	-	-	-	-	-	-	-	100	100	38	38	38	38	38	38	38
440V		-	-	-	-	-	-	-	-	-	38	38	38	38	25	25	25	25	25
500/525V		-	-	-	-	-	-	-	-	-	38	32	9	9	9	8	8	8	8
600V		-	-	-	-	-	-	-	-	-	5	5	4	4	4	4	4	4	4
690V		-	-	-	-	-	-	-	-	-	5	5	4	4	4	4	4	4	4

Back-up fuses are necessary in case of possibility of a short-circuit current higher than 100kA or 50kA at the installation point of the device (on request)

Ics = 100%Icu when Icu = 100kA

Ics = 75%Icu when Icu < 100kA



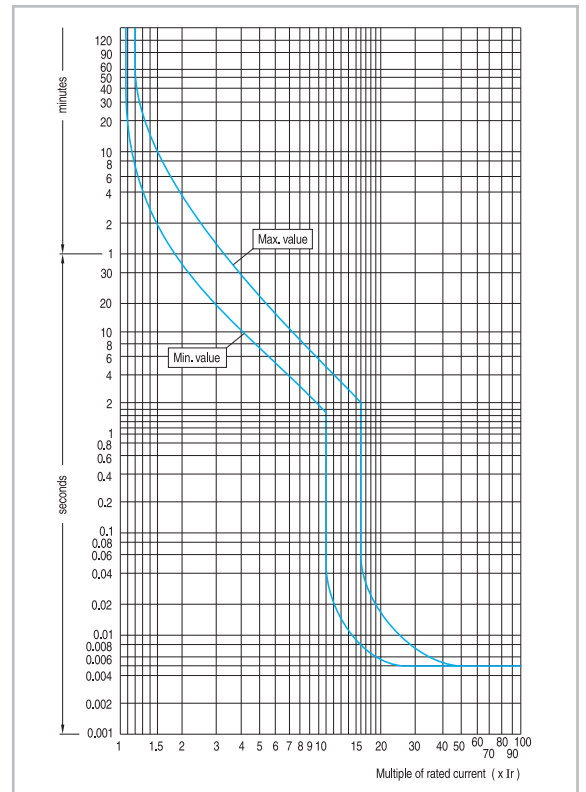
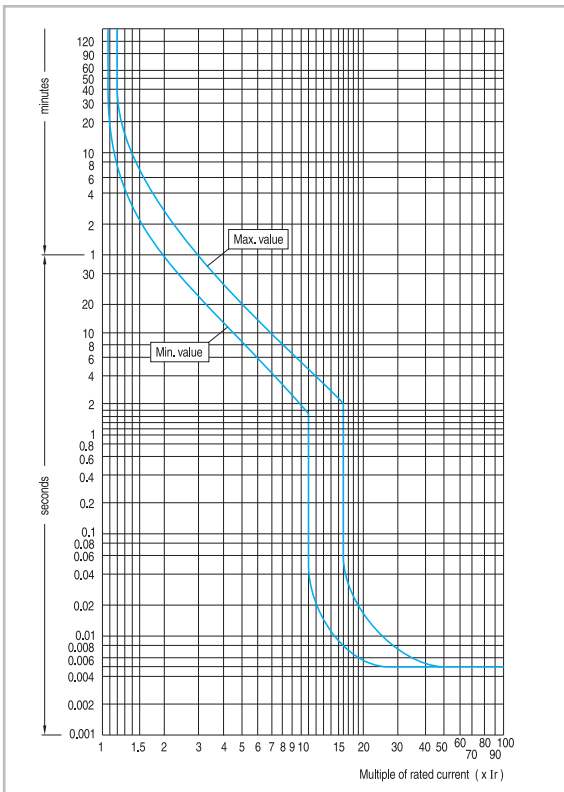
Back-up gl/gG fuses only if $I_{cs} > I_{cu}$ (kA)

		For ranges GPS1BSA* / GPS1MSA*																	
gl/gG fuses (A)		A	B	C	D	E	F	G	H	J	K	L	M	N	P	R	S	T	U
		1.6	0.25	0.4	0.63	1	1.6	2.5	4	6.3	10	13	16	20	25	32	40	50	63
230V	#	#	#	#	#	#	#	#	#	#	#	#	#	100	100	100	-	-	-
400V	#	#	#	#	#	#	#	#	#	#	#	80	100	100	100	100	-	-	-
440V	#	#	#	#	#	#	#	#	#	50	63	63	80	80	80	80	-	-	-
500V	#	#	#	#	#	#	#	#	#	50	50	63	63	63	80	80	-	-	-
600V	#	#	#	#	#	#	#	20	32	40	50	63	63	63	80	80	-	-	-
690V	#	#	#	#	#	#	#	20	32	40	50	50	63	63	63	63	-	-	-
		For ranges GPS1BHA* / GPS1MHA*																	
230V	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	-	-	-
400V	#	#	#	#	#	#	#	#	#	#	#	#	100	125	125	125	-	-	-
440V	#	#	#	#	#	#	#	#	#	#	63	63	80	80	100	100	-	-	-
500V	#	#	#	#	#	#	#	#	#	#	50	63	80	80	80	80	-	-	-
600V	#	#	#	#	#	#	#	25	40	50	50	63	63	63	80	80	-	-	-
690V	#	#	#	#	#	#	#	25	40	50	50	63	63	63	63	63	-	-	-
		For ranges GPS2BSA* / GPS2MSA*																	
230V	-	-	-	-	-	-	-	-	-	-	#	#	#	125	125	125	125	125	160
400V	-	-	-	-	-	-	-	-	-	-	#	80	100	125	125	125	125	125	160
440V	-	-	-	-	-	-	-	-	-	-	63	63	80	80	100	100	125	125	125
500V	-	-	-	-	-	-	-	-	-	-	63	63	80	80	80	80	100	100	125
600V	-	-	-	-	-	-	-	-	-	-	63	63	63	63	80	80	100	100	100
690V	-	-	-	-	-	-	-	-	-	-	63	63	63	63	63	63	63	80	100
		For ranges GPS2BHA* / GPS2MHA*																	
230V	-	-	-	-	-	-	-	-	-	-	#	#	#	#	#	#	#	#	#
400V	-	-	-	-	-	-	-	-	-	-	#	#	100	125	125	125	125	125	160
440V	-	-	-	-	-	-	-	-	-	-	63	63	80	80	100	100	125	125	125
500V	-	-	-	-	-	-	-	-	-	-	63	63	80	80	80	80	100	100	125
600V	-	-	-	-	-	-	-	-	-	-	80	63	63	63	80	80	100	100	100
690V	-	-	-	-	-	-	-	-	-	-	80	63	63	63	63	63	63	80	100

Back-up gl/gG fuses only if $I_{cs} > I_{cu}$ (kA)

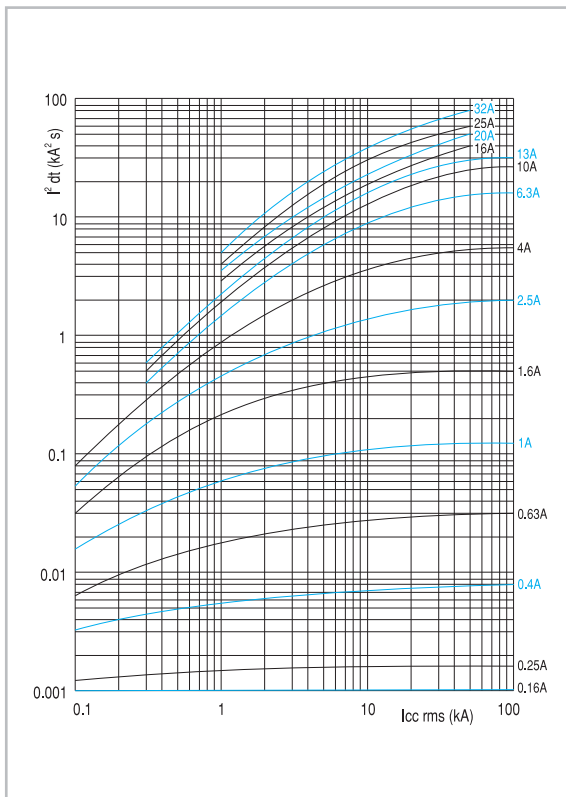
Manual motor starter: GPS1...

Manual motor starter: GPS2...

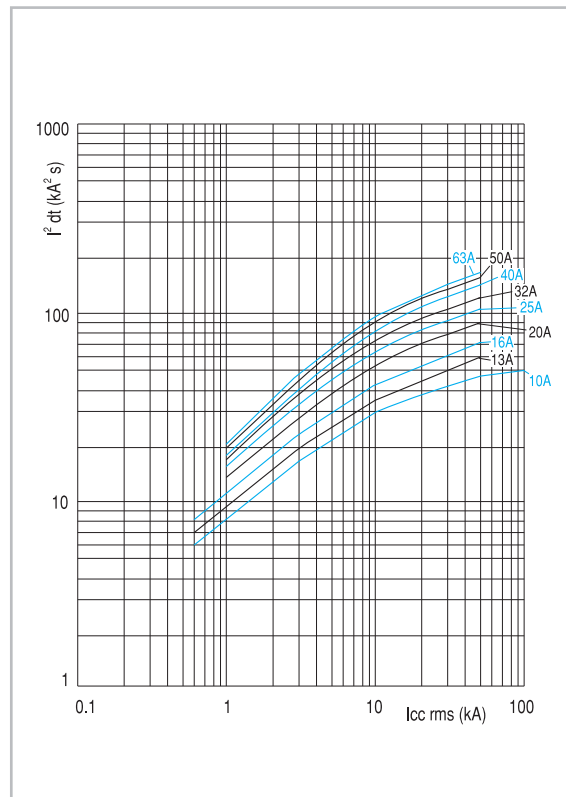


Specific let-through energy at $U_e = 400/415\text{ V}$

Manual motor starter: GPS1...

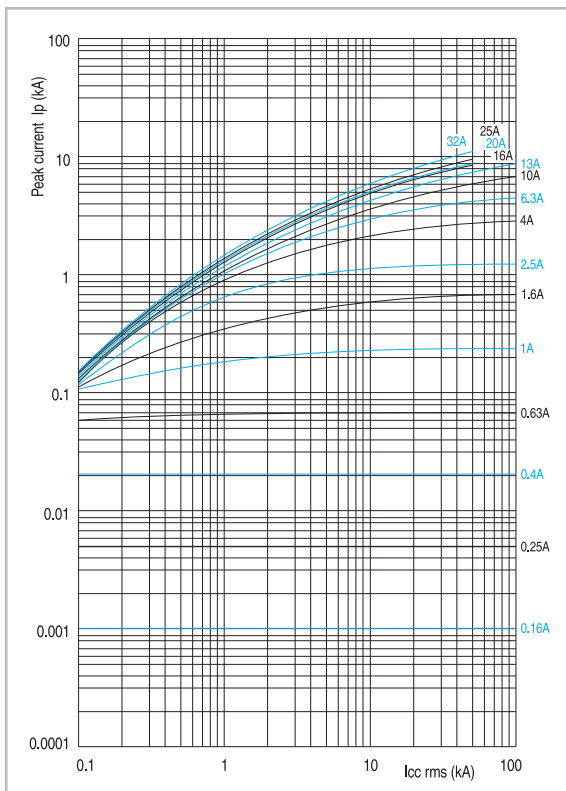


Manual motor starter: GPS2...



Peak current limitation at $U_e = 400/415\text{ V}$

Manual motor starter: GPS1...



Manual motor starter: GPS2...

