CARLO GAVAZZI
Automation Components

CARLO GAVAZZI

Manual Motor Starters

- Complete Ranges up to 100 Amps
- ON-OFF-Trip Three Position Operator
- Unique Handle Lock in the OFF Position
- Class 10, 20 Overload Trip Characteristics
- DIN Rail or Back Panel Mounting
- Finger Safe Terminals
- Trip Test









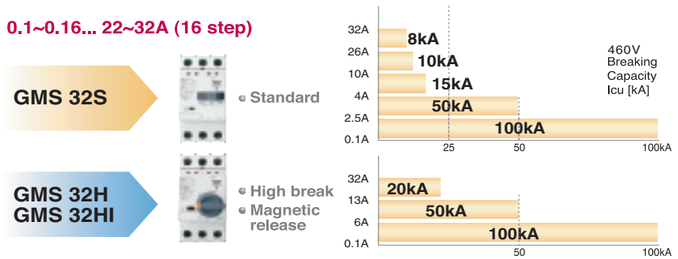
With Extended Warranty

Carlo Gavazzi GMS Manual Motor Starters provide complete ranges up to 100A



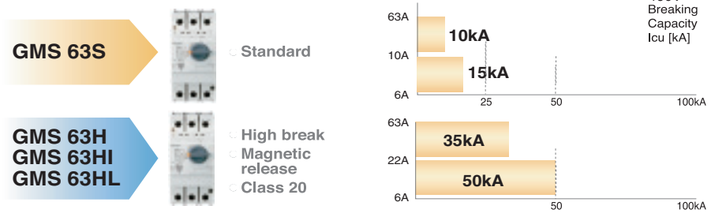
32AF

0.1~0.16... 22~32A (16 step)



63AF

6~10... 45~63A (9 step)



100AF

11~17... 80~100A (10 step)



To instantly specify products, check pricing and availability, visit www.Gavazzi*Online*.com

Specifications are subject to change without notice.

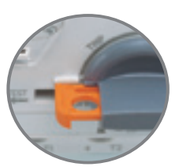
Carlo Gavazzi GMS Manual Motor Starters deliver more efficiency through various functions and compact design

[Scale 1:1]



- Front mounted auxiliary contact
- Easy mounting onto DIN-rail
- Large scale for current setting
- Auxiliaries are just snapped on: easy, fast, without tools
- Dial cover lock device
- Test trip device for checks of the trip mechanism
- Finger safe terminals
- Dial cover
- Handle Lock device (Off position)
- Three position operator handle: ON-OFF-TRIP (Only 100AF is applied)
- Identification labels

Handle Lock



Dial cover



Terminals

GMS32



GMS63



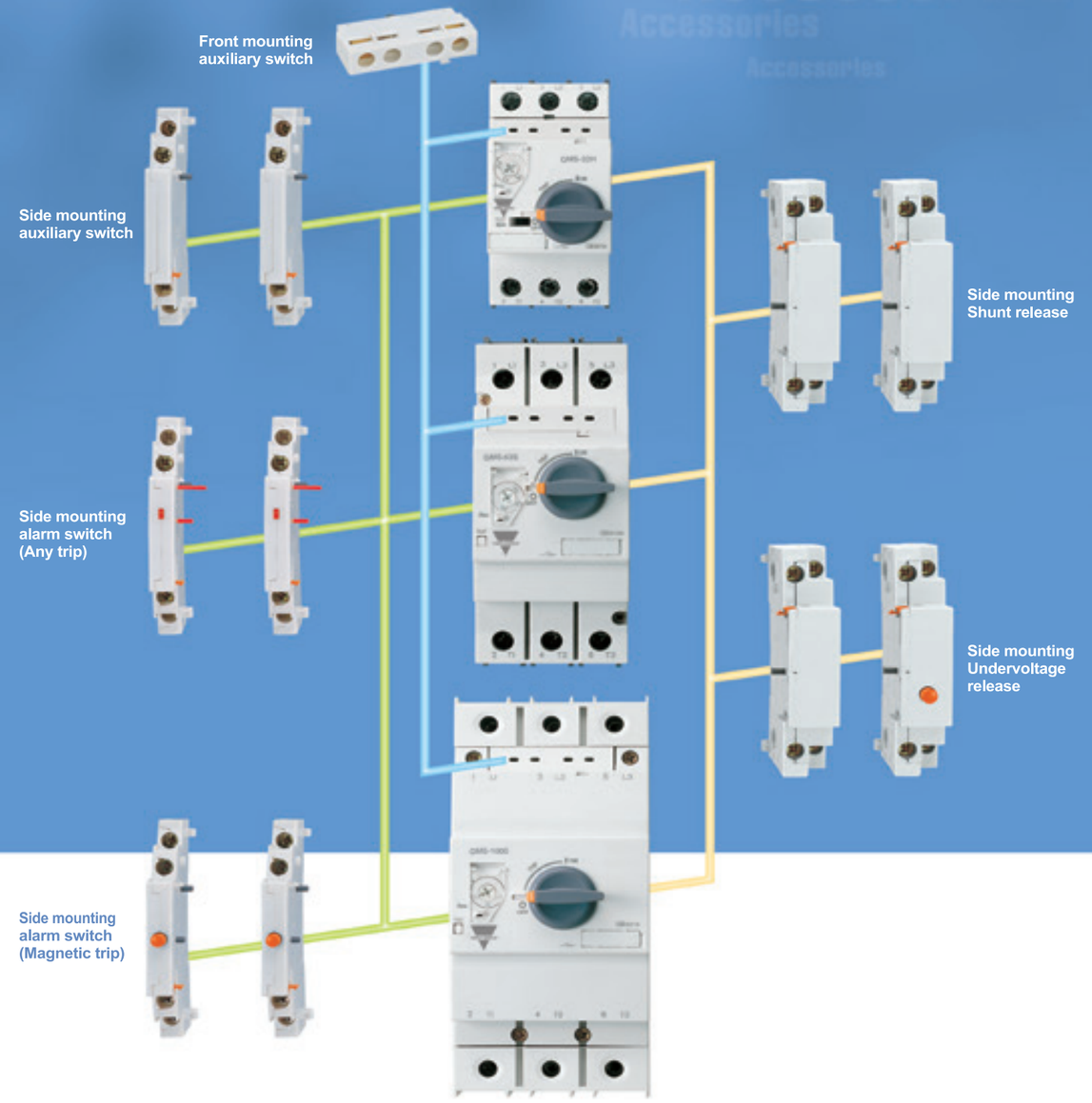
GMS100



To instantly specify products, check pricing and availability, visit www.Gavazzi*Online*.com

Common use from 32 to 100AF

A wide variety of accessories enables a flexible response to changes in specifications



Function

- Protection of group installation
- Protection of circuits
- Motor protection
- Starter protection
- Wide range of ambient temperature compensation
- Phase failure protection



Feature

- 45mm width up to 32A, 55mm width up to 63A and 70mm width rated to 100 amps
- Three position operator: ON-OFF-TRIP (Only 100AF is applied)
- Complete range of common accessories
- Handle lock in the OFF position
- Class 10,20 overload trip characteristics
- Trip test
- Finger safe terminal
- DIN rail and screw mounting

Standard

- The components fulfill the international standard IEC 60947
- The devices can be used as Manual Motor Starter in Group Installations According to UL508.

CE KEMA cUL

IEC 60947

UL 508, UL 508 Type E

CARLO GAVAZZI

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Quick selection table ... IEC rating








Frame		32AF				63AF				100AF			
Type	Current adjustable type	GMS-32S		GMS-32H		GMS-63S		GMS-63H		GMS-100S		GMS-100H	
	Instantaneous type	-		GMS-32HI				GMS-63HI		-		GMS-100HI	
	Class 20	-	-			-		GMS-63HL		-		GMS-100HL	
Breaking capacity		Standard		High break		Standard		High break		Standard		High break	
Handle Type		Rocker		Rotary		Rotary		Rotary		Rotary		Rotary	
Number of poles		3		3		3		3		3		3	
Rated operational voltage (Ue)		Up to 690V		Up to 690V		Up to 690V		Up to 690V		Up to 690V		Up to 690V	
Rated frequency		50/60 Hz		50/60 Hz		50/60 Hz		50/60 Hz		50/60 Hz		50/60 Hz	
Rated insulation voltage (Ui)		690V		690V		1,000V		1,000V		1,000V		1,000V	
Rated impulse voltage (Uimp)		6kV		6kV		8kV		8kV		8kV		8kV	
Utilization category	IEC 60 947-2 (Breaker)	Cat. A		Cat. A		Cat. A		Cat. A		Cat. A		Cat. A	
	IEC 60 947-4 (Motor starter)	AC 3		AC 3		AC 3		AC 3		AC 3		AC 3	
Shock resistance (IEC 68 Part 2-27)		25g		25g		25g		25g		25g		25g	
Degree of protection (IEC 60 529)		IP 20		IP 20		IP 20		IP 20		IP 20		IP 20	
Instantaneous short circuit release		13 × Ie max.		13 × Ie max.		13 × Ie max.		13 × Ie max.		13 × Ie max.		13 × Ie max.	
Mechanical endurance (Operating)		100,000		100,000		50,000		50,000		50,000		50,000	
Electrical endurance (Cycles)		100,000		100,000		25,000		25,000		25,000		25,000	
Max operating frequency per hour (Ope./h)		25		25		25		25		25		25	
Temperature compensation (Operation)		-20 ~ +60 ℃		-20 ~ +60 ℃		-20 ~ +60 ℃		-20 ~ +60 ℃		-20 ~ +60 ℃		-20 ~ +60 ℃	
Phase failure function		○		○		○		○		○		○	
Trip indicating function		×		×		×		○		○		○	
Test function		○		○		○		○		○		○	

Rated breaking capacity (kA)	Rated operational current (Ie)	Thermal release Adjustment range (A)	240V 230V		415V 400V		460V 440V		525V 500V		690V 600V		240V 230V		415V 400V		460V 440V		525V 500V		690V 600V		240V 230V		415V 400V		460V 440V		525V 500V		690V 600V		240V 230V		415V 400V		460V 440V		525V 500V		690V 600V		240V 230V		415V 400V		460V 440V		525V 500V		690V 600V		240V 230V		415V 400V		460V 440V		525V 500V		690V 600V	
			Icu	Ics	Icu	Ics	Icu	Ics	Icu	Ics	Icu	Ics	Icu	Ics	Icu	Ics	Icu	Ics	Icu	Ics	Icu	Ics	Icu	Ics	Icu	Ics	Icu	Ics	Icu	Ics	Icu	Ics	Icu	Ics	Icu	Ics	Icu	Ics	Icu	Ics	Icu	Ics	Icu	Ics	Icu	Ics	Icu	Ics	Icu	Ics	Icu	Ics	Icu	Ics	Icu	Ics	Icu	Ics	Icu	Ics
	0.16	0.1~0.16	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	0.25	0.16~0.25	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	0.4	0.25~0.4	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	0.63	0.4~0.63	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1	0.63~1	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1.6	1~1.6	100	100	100	100	100	100	100	100	3	3	100	100	100	100	100	100	100	100	100	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2.5	1.6~2.5	100	100	100	100	100	100	50	38	3	3	100	100	100	100	100	100	100	100	8	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4	2.5~4	100	100	100	100	50	38	15	11	3	3	100	100	100	100	100	100	100	100	8	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6	4~6	100	100	100	100	15	11	10	8	3	3	100	100	100	100	100	100	100	100	6	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	8	5~8	100	100	100	100	15	11	10	8	3	3	100	100	100	100	50	38	50	38	6	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10	6~10	100	100	50	38	15	11	6	5	3	3	100	100	100	100	50	38	50	38	6	6	100	100	100	100	15	12	10	8	4	3	100	100	100	100	50	38	50	38	6	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13	9~13	100	100	50	38	10	8	6	5	3	3	100	100	100	100	50	38	42	32	6	6	100	100	50	38	10	8	6	5	4	3	100	100	100	100	50	38	42	32	6	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	17	11~17	50	38	20	15	10	8	6	5	3	3	100	100	50	38	20	15	10	8	4	4	100	100	25	19	10	8	6	5	4	3	100	100	50	50	50	38	12	9	5	5	100	100	50	38	40	30	25	19	10	8	100	100	100	100	50	38	35	27	12	9
	22	14~22	40	30	15	11	8	6	6	5	3	3	100	100	50	38	20	15	10	8	4	4	50	38	25	19	10	8	6	5	4	3	100	100	50	50	50	38	12	9	5	5	100	100	50	38	40	30	25	19	10	8	100	100	100	50	50	38	35	27	12	9
	26	18~26	40	30	15	11	8	6	6	5	3	3	100	100	50	38	20	15	10	8	4	4	50	38	25	19	10	8	6	5	4	3	100	100	50	50	35	27	12	9	5	5	100	100	50	38	40	30	25	19	10	8	100	100	100	50	50	38	35	27	12	9
	32	22~32	30	22	15	11	6	4	5	4	3	3	100	100	50	38	20	15	10	8	4	4	50	38	25	19	10	8	6	5	4	3	100	100	50	50	35	27	10	8	5	5	100	100	50	38	40	30	15	11	10	8	100	100	100	50	50	38	25	19	12	9
	40	28~40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50	38	25	19	10	8	6	5	4	3	100	100	50	50	35	27	10	8	5	5	100	100	50	38	40	30	15	11	6	5	100	100	100	50	50	38	20	15	12	9
	50	34~50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50	38	25	19	10	8	6	5	4	3	100	100	50	50	35	27	10	8	5	5	100	100	50	38	40	30	12	9	6	5	100	100	100	50	50	38	15	11	10	8
	63	45~63	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50	38	25	19	10	8	6	5	4	3	100	100	50	50	35	27	10	8	5	5	100	100	50	38	40	30	12	9	6	5	100	100	100	50	50	38	15	11	8	6
	75	55~75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100	100	50	38	40	30	8	6	5	4	100	100	75	50	50	38	12	9	6	6
	90	70~90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100	100	50	38	40	30	8	6	5	4	100	100	75	50	50	38	12	9	6	6
	100	80~100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100	100	50	38	40	30	8	6	5	4	100	100	75	50	50	38	12	9	6	6

Ordering Example: Specify Rated Operational Current

GMS-32S-0.16 (0.1 to 0.16)

GMS-32S-0.25 (0.16 to 0.25)

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Motor protection

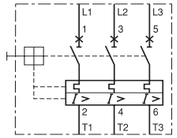
- Adjustable thermal release
- Magnetic release 13 × Ie max.
- Trip class 10
- Ambient temperature compensation
- Phase-failure protection



GMS-32S



GMS-32H



(Circuit diagram)

Type	Rated operational current Ie [A]	Thermal release Adjustment range [A]	Magnetic release Operating current [A]	Switching of 3 phase AC motors, AC-2, AC-3						440/460V	
				3-phase [kW] (50/60Hz)			3-phase [HP] (60Hz)				
				230V	400V	690V	230V	460V	575V	Icu [kA]	Ics [kA]
GMS-32S (Standard)	0.16	0.1...0.16	2.1	-	0.02	-	-	-	-	100	100
	0.25	0.16...0.25	3.3	0.03	0.06	-	-	-	-	100	100
	0.4	0.25...0.4	5.2	0.06	0.09	-	-	-	-	100	100
	0.63	0.4...0.63	8.2	0.09	0.12	0.25	-	-	-	100	100
	1	0.63...1.0	13	0.12	0.25	0.55	-	1/2	1/2	100	100
	1.6	1.0...1.6	20.8	0.25	0.55	1.1	1/3	3/4	1	100	100
	2.5	1.6...2.5	32.5	0.37	0.75	1.5	1/2	1½	1½	100	100
	4	2.5...4.0	52	0.75	1.5	3	1	2	3	50	38
	6	4...6	78	1.5	2.2	4	1½	5	5	15	11
	8	5...8	104	1.5	3	5.5	2	5	5	15	11
	10	6...10	130	3	4	7.5	3	7½	10	15	11
	13	9...13	169	3	5.5	11	3	7½	10	10	8
	17	11...17	221	4	7.5	11	5	10	15	10	8
	22	14...22	286	4	7.5	15	7½	15	20	8	6
	26	18...26	338	5.5	11	18.5	7½	15	20	8	6
	32	22...32	416	7.5	15	22	10	20	30	6	4
GMS-32H (High break)	0.16	0.1...0.16	2.1	-	0.02	-	-	-	-	100	100
	0.25	0.16...0.25	3.3	0.03	0.06	-	-	-	-	100	100
	0.4	0.25...0.4	5.2	0.06	0.09	-	-	-	-	100	100
	0.63	0.4...0.63	8.2	0.09	0.12	0.25	-	-	-	100	100
	1	0.63...1.0	13	0.12	0.25	0.55	-	1/2	1/2	100	100
	1.6	1.0...1.6	20.8	0.25	0.55	1.1	1/3	3/4	1	100	100
	2.5	1.6...2.5	32.5	0.37	0.75	1.5	1/2	1½	1½	100	100
	4	2.5...4.0	52	0.75	1.5	3	1	2	3	100	100
	6	4...6	78	1.5	2.2	4	1½	5	5	100	100
	8	5...8	104	1.5	3	5.5	2	5	5	50	38
	10	6...10	130	3	4	7.5	3	7½	10	50	38
	13	9...13	169	3	5.5	11	3	7½	10	50	38
	17	11...17	221	4	7.5	11	5	10	15	20	15
	22	14...22	286	4	7.5	15	7½	15	20	20	15
	26	18...26	338	5.5	11	18.5	7½	15	20	20	15
	32	22...32	416	7.5	15	22	10	20	30	20	15

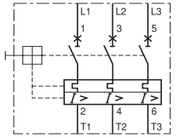
- Adjustable thermal release
- Magnetic release 13 × Ie max.
- Trip class 10
- Ambient temperature compensation
- Phase-failure protection



GMS-63H



GMS-100H



(Circuit diagram)

Type	Rated operational current Ie [A]	Thermal release Adjustment range [A]	Magnetic release Operating current [A]	Switching of 3 phase AC motors, AC-2, AC-3						440/460V	
				3-phase [kW] (50/60Hz)			3-phase [HP] (60Hz)				
				230V	400V	690V	230V	460V	575V	Icu [kA]	Ics [kA]
GMS-63S (Standard)	10	6~10	130	3	4	7.5	3	7½	10	15	12
	13	9~13	169	3	5.5	11	3	7½	10	10	8
	17	11~17	221	4	7.5	11	5	10	15	10	8
	22	14~22	286	4	7.5	15	7½	15	20	10	8
	26	18~26	338	5.5	11	18.5	10	20	25	10	8
	32	22~32	416	7.5	15	22	10	25	30	10	8
	40	28~40	520	7.5	18.5	30	15	30	40	10	8
	50	34~50	650	11	22	45	15	40	50	10	8
	63	45~63	819	15	30	55	20	50	60	10	8
GMS-63H (High break)	10	6~10	130	3	4	7.5	3	7½	10	50	38
	13	9~13	169	3	5.5	11	3	7½	10	50	38
	17	11~17	221	4	7.5	11	5	10	15	50	38
	22	14~22	286	4	7.5	15	7½	15	20	50	38
	26	18~26	338	5.5	11	18.5	10	20	25	35	27
	32	22~32	416	7.5	15	22	10	25	30	35	27
	40	28~40	520	7.5	18.5	30	15	30	40	35	27
	50	34~50	650	11	22	45	15	40	50	35	27
	63	45~63	819	15	30	55	20	50	60	35	27
GMS-100S (Standard)	17	11~17	221	4	7.5	11	5	10	15	40	30
	22	14~22	286	4	7.5	15	7½	15	20	40	30
	26	18~26	338	5.5	11	18.5	10	20	25	40	30
	32	22~32	416	7.5	15	22	10	25	30	40	30
	40	28~40	520	7.5	18.5	30	15	30	40	40	30
	50	34~50	650	11	22	45	15	40	50	40	30
	63	45~63	819	15	30	55	20	50	60	40	30
	75	55~75	975	22	37	63	25	60	75	40	30
	90	70~90	1170	30	45	75	30	75	100	40	30
	100	80~100	1300	30	45	90	40	75	100	40	30
GMS-100H (High break)	17	11~17	221	4	7.5	11	5	10	15	50	38
	22	14~22	286	4	7.5	15	7½	15	20	50	38
	26	18~26	338	5.5	11	18.5	10	20	25	50	38
	32	22~32	416	7.5	15	22	10	25	30	50	38
	40	28~40	520	7.5	18.5	30	15	30	40	50	38
	50	34~50	650	11	22	45	15	40	50	50	38
	63	45~63	819	15	30	55	20	50	60	50	38
	75	55~75	975	22	37	63	25	60	75	50	38
	90	70~90	1170	30	45	75	30	75	100	50	38
	100	80~100	1300	30	45	90	40	75	100	50	38

Short-circuit protection for starters

- Without thermal releases
- Magnetic release 13 × Ie max.



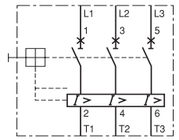
GMS-32HI



GMS-63HI



GMS-100HI



(Circuit diagram)

Type	Rated operational current Ie [A]	Thermal release Adjustment range [A]	Magnetic release Operating current [A]	Switching of 3 phase AC motors, AC-2, AC-3						440/460V	
				3-phase [kW] (50/60Hz)			3-phase [HP] (60Hz)				
				230V	400V	690V	230V	460V	575V	Icu [kA]	Ics [kA]
GMS-32HI (High break)	0.16	-	2.1	-	0.02	-	-	-	-	100	100
	0.25	-	3.3	0.03	0.06	-	-	-	-	100	100
	0.4	-	5.2	0.06	0.09	-	-	-	-	100	100
	0.63	-	8.2	0.09	0.12	0.25	-	-	-	100	100
	1	-	13	0.12	0.25	0.55	-	1/2	1/2	100	100
	1.6	-	20.8	0.25	0.55	1.1	1/3	3/4	1	100	100
	2.5	-	32.5	0.37	0.75	1.5	1/2	1½	1½	100	100
	4	-	52	0.75	1.5	3	1	2	3	100	100
	6	-	78	1.5	2.2	4	1½	5	5	100	100
	8	-	104	1.5	3	5.5	2	5	5	50	38
	10	-	130	3	4	7.5	3	7½	10	50	38
	13	-	169	3	5.5	11	3	7½	10	50	38
	17	-	221	4	7.5	11	5	10	15	20	15
	22	-	286	4	7.5	15	7½	15	20	20	15
	26	-	338	5.5	11	18.5	7½	15	20	20	15
	32	-	416	7.5	15	22	10	20	30	20	15
GMS-63HI (High break)	10	-	130	3	4	7.5	3	7½	10	50	38
	13	-	169	3	5.5	11	3	7½	10	50	38
	17	-	221	4	7.5	11	5	10	15	50	38
	22	-	286	4	7.5	15	7½	15	20	50	38
	26	-	338	5.5	11	18.5	10	20	25	35	27
	32	-	416	7.5	15	22	10	25	30	35	27
	40	-	520	7.5	18.5	30	15	30	40	35	27
	50	-	650	11	22	45	15	40	50	35	27
	63	-	819	15	30	55	20	50	60	35	27
GMS-100HI (High break)	17	-	221	4	7.5	11	5	10	15	50	38
	22	-	286	4	7.5	15	7½	15	20	50	38
	26	-	338	5.5	11	18.5	10	20	25	50	38
	32	-	416	7.5	15	22	10	25	30	50	38
	40	-	520	7.5	18.5	30	15	30	40	50	38
	50	-	650	11	22	45	15	40	50	50	38
	63	-	819	15	30	55	20	50	60	50	38
	75	-	975	22	37	63	25	60	75	50	38
	90	-	1170	30	45	75	30	75	100	50	38
	100	-	1300	30	45	90	40	75	100	50	38

Motor protection ··· Class 20

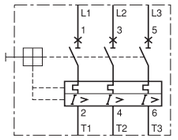
- Adjustable thermal release
- Magnetic release 13 × Ie max.
- Trip class 20
- Ambient temperature compensation
- Phase-failure protection



GMS-63H



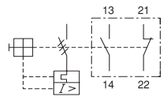
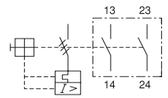
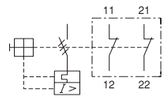
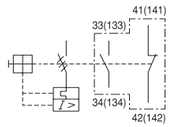
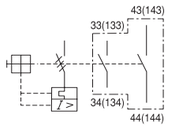
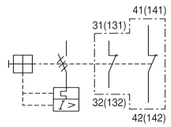
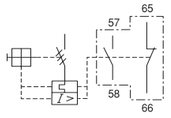
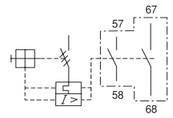
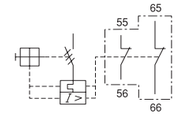
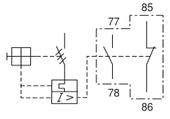
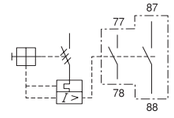
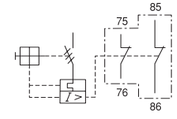
GMS-100H



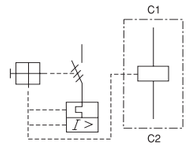
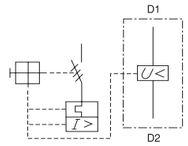
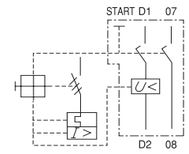
(Circuit diagram)

Type	Rated operational current Ie [A]	Thermal release Adjustment range [A]	Magnetic release Operating current [A]	Switching of 3 phase AC motors, AC-2, AC-3						440/460V	
				3-phase [kW] (50/60Hz)			3-phase [HP] (60Hz)				
				230V	400V	690V	230V	460V	575V	Icu [kA]	Ics [kA]
GMS-63HL (High break)	10	6~10	130	3	4	7.5	3	7½	10	50	38
	13	9~13	169	3	5.5	11	3	7½	10	50	38
	17	11~17	221	4	7.5	11	5	10	15	50	38
	22	14~22	286	4	7.5	15	7½	15	20	50	38
	26	18~26	338	5.5	11	18.5	10	20	25	35	27
	32	22~32	416	7.5	15	22	10	25	30	35	27
	40	28~40	520	7.5	18.5	30	15	30	40	35	27
	50	34~50	650	11	22	45	15	40	50	35	27
	63	45~63	819	15	30	55	20	50	60	35	27
GMS-100HL (High break)	17	11~17	221	4	7.5	11	5	10	15	50	38
	22	14~22	286	4	7.5	15	7½	15	20	50	38
	26	18~26	338	5.5	11	18.5	10	20	25	50	38
	32	22~32	416	7.5	15	22	10	25	30	50	38
	40	28~40	520	7.5	18.5	30	15	30	40	50	38
	50	34~50	650	11	22	45	15	40	50	50	38
	63	45~63	819	15	30	55	20	50	60	50	38
	75	55~75	975	22	37	63	25	60	75	50	38
	90	70~90	1170	30	45	75	30	75	100	50	38
	100	80~100	1300	30	45	90	40	75	100	50	38

Accessories

Type	Description	Connection diagram
GFX... 	Auxiliary Switch · Front mounting · 2-pole · One front mounting module per circuit breaker	1NO1NC  **GFX-11** 2NO  **GFX-20** 2NC  **GFX-02**
GSX... 	Auxiliary Switch · Side mounting on the left · 2-pole · One side mounting module per circuit breaker	1NO1NC  **GSX-11** 2NO  **GSX-20** 2NC  **GSX-02**
GSA... 	Any Trip Alarm Switch · Side mounting on the left · 2-pole · One side mounting module per circuit breaker. (Always directly fitted to the circuit breaker).	 **GSA32-11 GSA63100-11**  **GSA32-20 GSA63100-20**  **GSA32-02 GSA63100-02**
GMS-32: GMS-63/100:		
GMA... 	Magnetic Trip Alarm Switch · Side mounting on the left · 2-pole · One side mounting module per circuit breaker. (Always directly fitted to the circuit breaker except using with Any Trip Alarm Switch).	 **GMA-11**  **GMA-20**  **GMA-02**

Ordering Example: Specify Contact Arrangement
GFX-11 (1NO 1NC)
GFX-20 (2NO)
GFX-02 (2NC)

Type	Description	Connection diagram	
GSR... 	Shunt release · Side mounting on the right · One side mounting module per circuit breaker. (Always directly fitted to the circuit breaker).		24V 50Hz / 28V 60Hz 110~127V 50Hz / 120V 60Hz 220~230V 50Hz / 240~260V 60Hz 240V 50Hz / 277V 60Hz 380~400V 50Hz / 440~460V 60Hz 415~440V 50Hz / 460~480V 60Hz
GUR... 	Undervoltage release · Side mounting on the right · One side mounting module per circuit breaker. (Always directly fitted to the circuit breaker).		24V 50Hz / 28V 60Hz 110~127V 50Hz / 120V 60Hz 220~230V 50Hz / 240~260V 60Hz 240V 50Hz / 277V 60Hz 380~400V 50Hz / 440~460V 60Hz 415~440V 50Hz / 460~480V 60Hz
GURX... 	Undervoltage release with Switch (Rotary Handle Only) · Side mounting on the right · Include 2NO Auxiliary contact · One side mounting module per circuit breaker. (Always directly fitted to the circuit breaker).		24V 50Hz / 28V 60Hz 110~127V 50Hz / 120V 60Hz 220~230V 50Hz / 240~260V 60Hz 240V 50Hz / 277V 60Hz 380~400V 50Hz / 440~460V 60Hz 415~440V 50Hz / 460~480V 60Hz

Others

Type	Description	Applied Type
PIL32 	**Push-in lug** · For screwing the MMS on to mounting plates.	**GMS-32S** **GMS-32H**
IB100 	**Insulation barriers** · Insulation barriers with increased creepage distances and clearances for UL	**GMS-100S** **GMS-100H**

Busbar accessories


GAVG45-14-3ABK


GAVG63-14-3ABK


GAVG54-14-3ABK


GAVCPM35412


GAVCPM36312


GAVB54


GAVGE1-14-25BK


GDA16SA

	45mm Spacing (rated 63A)	54mm Spacing (rated 63A)	63mm Spacing (rated 63A)	54mm Spacing (rated 120A)	63mm Spacing (rated 120A)	Terminal cover	Supply connector	Connection module
Type	**GAVG45-14-2ABK**	**GAVG54-14-2ABK**	**GAVG63-14-2ABK**	**GAVCPM25412**	**GAVCPM26312**	**GAVB54**	**GAVGE1-14-25BK**	**GDA16SA**
Description	For 2 GMS-32S/H	For 2 GMS-32S/H + accessories (side mnt aux sw)	For 2 GMS-32S/H + accessories (side mnt undervoltage or shunt trip)	For 2 GMS-63	For 2 GMS-63 + accessories (side mnt aux sw)	3 Pole protective cover for GAVG....	3 Phase input terminal 63A	For connecting GMS-32S to CGMS-6A - CGMS-12A
Type	**GAVG45-14-3ABK**	**GAVG54-14-3ABK**	**GAVG63-14-3ABK**	**GAVCPM35412**	**GAVCPM36312**	**GAVTA120**	**GAVBTC50E**	**GDA16SD**
Description	For 3 GMS-32S/H	For 3 GMS-32S/H + accessories (side mnt aux. sw)	For 3 GMS-32S/H + accessories (side mnt undervoltage or shunt trip)	For 3 GMS-63	For 3 GMS-63 + accessories (side mnt aux. sw)	3 Pole protective cover for GAVCPM..	3 Phase Input terminal 120A	For connecting GMS-32S to CGMS-6D - CGMS-12D
Type	**GAVG45-14-4ABK**	**GAVG54-14-4ABK**	**GAVG63-14-4ABK**	**GAVCPM45412**	**GAVCPM46312**			**GDA16HA**
Description	For 4 GMS-32S/H	For 4 GMS-32S/H + accessories (side mnt aux. sw)	For 4 GMS-32S/H + accessories (side mnt undervoltage or shunt trip)	For 4 GMS-63	For 4 GMS-63 + accessories (side mnt aux. sw)			For connecting GMS-32H to CGMS-6A - CGMS-12A
Type	**GAVG45-14-5ABK**	**GAVG54-14-5ABK**	**GAVG63-14-5ABK**					**GDA16HD**
Description	For 5 GMS-32S/H	For 5 GMS-32S/H + accessories (side mnt aux. sw)	For 5 GMS-32S/H + accessories (side mnt undervoltage or shunt trip)					For connecting GMS-32H to CGMS-6D - CGMS-12D

IEC performance data (Motor protection)



● GMS-100S

Rated operational current I_e [A]		17	22	26	32	40	50	63	75	90	100
Switching of standard three-phase motors											
AC-2, AC-3											
230/240V	[kW]	3.7/4	4	5.5	7.5	7.5	11	15	22	30	30
400/415V	[kW]	7.5	7.5	11	15	18.5	22	30	37	45	45
500V	[kW]	11	11	15	18.5	22	30	37	45	55	63
690V	[kW]	11	15	18.5	22	30	45	55	63	75	90
Back-up fuses											
gG, gL,, only if Icc>I_{cu}											
(* = No back up fuse required)											
230/240V	[A]	*	*	*	*	*	*	*	*	*	*
400/415V	[A]	100	125	125	125	160	160	160	160	160	160
440/460V	[A]	100	125	125	125	125	125	160	160	160	160
500V	[A]	100	100	100	100	100	100	100	125	125	125
690V	[A]	63	80	80	80	80	80	80	100	125	125
Ultimate short-circuit breaking capacity I_{cu}											
230/240V	[kA]	100	100	100	100	100	100	100	100	100	100
400/415V	[kA]	50	50	50	50	50	50	50	50	50	50
440/460V	[kA]	40	40	40	40	40	40	40	40	40	40
500V	[kA]	25	25	25	15	15	12	12	8	8	8
690V	[kA]	10	10	10	10	6	6	6	5	5	5
Rated service short-circuit breaking capacity I_{cs}											
230/240V	[kA]	100	100	100	100	100	100	100	100	100	100
400/415V	[kA]	38	38	38	38	38	38	38	38	38	38
440/460V	[kA]	30	30	30	30	30	30	30	30	30	30
500V	[kA]	19	19	19	11	11	9	9	6	6	6
690V	[kA]	8	8	8	8	5	5	5	4	4	4



● GMS-100H

Rated operational current I_e [A]		17	22	26	32	40	50	63	75	90	100
Switching of standard three-phase motors											
AC-2, AC-3											
230/240V	[kW]	3.7/4	4	5.5	7.5	7.5	11	15	22	30	30
400/415V	[kW]	7.5	7.5	11	15	18.5	22	30	37	45	45
500V	[kW]	11	11	15	18.5	22	30	37	45	55	63
690V	[kW]	11	15	18.5	22	30	45	55	63	75	90
Back-up fuses											
gG, gL,, only if Icc>I_{cu}											
(*= No back up fuse required)											
230/240V	[A]	*	*	*	*	*	*	*	*	*	*
400/415V	[A]	*	*	*	*	*	*	*	*	*	*
440/460V	[A]	125	125	125	160	160	160	200	200	200	200
500V	[A]	100	125	125	125	160	160	160	160	160	160
690V	[A]	80	80	80	80	80	100	100	125	160	160
Ultimate short-circuit breaking capacity I_{cu}											
230/240V	[kA]	100	100	100	100	100	100	100	100	100	100
400/415V	[kA]	100	100	100	100	100	100	100	75	75	75
440/460V	[kA]	50	50	50	50	50	50	50	50	50	50
500V	[kA]	35	35	35	25	20	15	15	12	12	12
690V	[kA]	12	12	12	12	12	10	8	6	6	6
Rated service short-circuit breaking capacity I_{cs}											
230/240V	[kA]	100	100	100	100	100	100	100	100	100	100
400/415V	[kA]	100	50	50	50	50	50	50	50	50	50
440/460V	[kA]	38	38	38	38	38	38	38	38	38	38
500V	[kA]	27	27	27	19	15	11	11	9	9	9
690V	[kA]	9	9	9	9	9	8	6	6	6	6

Note) * = Short circuit proof up to 50 or 100kA.
No back up fuse required.

IEC performance data (Short-circuit protection for starters)

● GMS-32HI

Rated operational current I_e [A]		0.16	0.25	0.4	0.63	1	1.6	2.5	4	6	8	10	13	17	22	26	32
AC-2, AC-3																	
230/240V	[kW]	-	0.03	0.06	0.09	0.12	0.18/0.25	0.37	0.55/0.75	1.1/1.5	1.5	2.2/3	3	3.7/4	4	5.5	7.5
400/415V	[kW]	0.02	0.06	0.09	0.12	0.18/0.25	0.37/0.55	0.75	1.1/1.5	2.2	3	3.7/4	5.5	7.5	7.5	11	15
500V	[kW]	-	-	-	0.25	0.37	0.55/0.75	1.1	1.5/2.2	3	3.7	4/5.5	7.5	11	11	15	18.5
690V	[kW]	-	-	-	0.25	0.37/0.55	0.75/1.1	1.5	2.2/3	3.7/4	5.5	7.5	11	11	15	18.5	22
Back-up fuses																	
gG, gL,, only if Icc>I_{cu}																	
(* = No back up fuse required)																	
230/240V	[A]	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
400/415V	[A]	*	*	*	*	*	*	*	*	*	*	*	*	100	125	125	125
440/460V	[A]	*	*	*	*	*	*	*	*	*	80	80	80	80	100	100	100
500V	[A]	*	*	*	*	*	*	*	*	*	63	80	80	80	80	80	80
690V	[A]	*	*	*	*	*	*	35	40	50	63	63	63	63	63	63	63
Ultimate short-circuit breaking capacity I_{cu}																	
230/240V	[kA]	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
400/415V	[kA]	100	100	100	100	100	100	100	100	100	100	100	100	50	50	50	50
440/460V	[kA]	100	100	100	100	100	100	100	100	100	50	50	50	20	20	20	20
500V	[kA]	100	100	100	100	100	100	100	100	100	50	50	42	10	10	10	10
690V	[kA]	100	100	100	100	100	100	8	8	6	6	6	6	4	4	4	4
Rated service short-circuit breaking capacity I_{cs}																	
230/240V	[kA]	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
400/415V	[kA]	100	100	100	100	100	100	100	100	100	100	100	100	38	38	38	38
440/460V	[kA]	100	100	100	100	100	100	100	100	100	38	38	38	15	15	15	15
500V	[kA]	100	100	100	100	100	100	100	100	100	38	38	32	8	8	8	8
690V	[kA]	100	100	100	100	100	100	8	8	6	6	6	6	4	4	4	4

● GMS-63HI

Rated operational current I_e [A]		10	13	17	22	26	32	40	50	63
AC-2, AC-3										
230/240V	[kW]	2.2/3	3	3.7/4	4	5.5	7.5	7.5	11	15
400/415V	[kW]	3.7/4	5.5	7.5	7.5	11	15	18.5	22	30
500V	[kW]	4/5.5	7.5	11	11	15	18.5	22	30	37
690V	[kW]	7.5	11	11	15	18.5	22	30	45	55
Back-up fuses										
gG, gL,, only if Icc>I_{cu}										
(* = No back up fuse required)										
230/240V	[A]	*	*	*	*	*	*	*	*	*
400/415V	[A]	*	*	100	125	125	125	160	160	160
440/460V	[A]	100	100	100	125	125	125	125	125	160
500V	[A]	100	100	100	100	100	100	100	100	100
690V	[A]	63	63	63	80	80	80	80	80	80
Ultimate short-circuit breaking capacity I_{cu}										
230/240V	[kA]	100	100	100	100	100	100	100	100	100
400/415V	[kA]	100	100	50	50	50	50	50	50	50
440/460V	[kA]	50	50	50	50	35	35	35	35	35
500V	[kA]	50	42	12	12	12	10	10	10	10
690V	[kA]	6	6	5	5	5	5	5	5	5
Rated service short-circuit breaking capacity I_{cs}										
230/240V	[kA]	100	100	100	100	100	100	100	100	100
400/415V	[kA]	100	100	50	50	50	50	50	50	50
440/460V	[kA]	38	38	38	38	27	27	27	27	27
500V	[kA]	38	32	9	9	9	8	8	8	8
690V	[kA]	5	5	5	5	5	5	5	5	5

● GMS-100HI

Rated operational current I_e [A]		17	22	26	32	40	50	63	75	90	100
AC-2, AC-3											
230/240V	[kW]	3.7/4	4	5.5	7.5	7.5	11	15	22	30	30
400/415V	[kW]	7.5	7.5	11	15	18.5	22	30	37	45	45
500V	[kW]	11	11	15	18.5	22	30	37	45	55	63
690V	[kW]	11	15	18.5	22	30	45	55	63	75	90
Back-up fuses											
gG, gL,, only if Icc>I_{cu}											
(* = No back up fuse required)											
230/240V	[A]	*	*	*	*	*	*	*	*	*	*
400/415V	[A]	*	*	*	*	*	*	*	*	*	*
440/460V	[A]	125	125	125	160	160	160	200	200	200	200
500V	[A]	100	125	125	125	160	160	160	160	160	160
690V	[A]	80	80	80	80	80	100	100	125	160	160
Ultimate short-circuit breaking capacity I_{cu}											
230/240V	[kA]	100	100	100	100	100	100	100	100	100	100
400/415V	[kA]	100	100	100	100	100	100	100	75	75	75
440/460V	[kA]	50	50	50	50	50	50	50	50	50	50
500V	[kA]	35	35	35	25	20	15	15	12	12	12
690V	[kA]	12	12	12	12	12	10	8	6	6	6
Rated service short-circuit breaking capacity I_{cs}											
230/240V	[kA]	100	100	100	100	100	100	100	100	100	100
400/415V	[kA]	100	50	50	50	50	50	50	50	50	50
440/460V	[kA]	38	38	38	38	38	38	38	38	38	38
500V	[kA]	27	27	27	19	15	11	11	9	9	9
690V	[kA]	9	9	9	9	9	8	6	6	6	6

IEC performance data (Motor protection)



● GMS-100S

Rated operational current I_e [A]		17	22	26	32	40	50	63	75	90	100
Switching of standard three-phase motors											
AC-2, AC-3											
230/240V	[kW]	3.7/4	4	5.5	7.5	7.5	11	15	22	30	30
400/415V	[kW]	7.5	7.5	11	15	18.5	22	30	37	45	45
500V	[kW]	11	11	15	18.5	22	30	37	45	55	63
690V	[kW]	11	15	18.5	22	30	45	55	63	75	90
Back-up fuses											
gG, gL,, only if Icc>I_{cu}											
(* = No back up fuse required)											
230/240V	[A]	*	*	*	*	*	*	*	*	*	*
400/415V	[A]	100	125	125	125	160	160	160	160	160	160
440/460V	[A]	100	125	125	125	125	125	160	160	160	160
500V	[A]	100	100	100	100	100	100	100	125	125	125
690V	[A]	63	80	80	80	80	80	80	100	125	125
Ultimate short-circuit breaking capacity I_{cu}											
230/240V	[kA]	100	100	100	100	100	100	100	100	100	100
400/415V	[kA]	50	50	50	50	50	50	50	50	50	50
440/460V	[kA]	40	40	40	40	40	40	40	40	40	40
500V	[kA]	25	25	25	15	15	12	12	8	8	8
690V	[kA]	10	10	10	10	6	6	6	5	5	5
Rated service short-circuit breaking capacity I_{cs}											
230/240V	[kA]	100	100	100	100	100	100	100	100	100	100
400/415V	[kA]	38	38	38	38	38	38	38	38	38	38
440/460V	[kA]	30	30	30	30	30	30	30	30	30	30
500V	[kA]	19	19	19	11	11	9	9	6	6	6
690V	[kA]	8	8	8	8	5	5	5	4	4	4



● GMS-100H

Rated operational current I_e [A]		17	22	26	32	40	50	63	75	90	100
Switching of standard three-phase motors											
AC-2, AC-3											
230/240V	[kW]	3.7/4	4	5.5	7.5	7.5	11	15	22	30	30
400/415V	[kW]	7.5	7.5	11	15	18.5	22	30	37	45	45
500V	[kW]	11	11	15	18.5	22	30	37	45	55	63
690V	[kW]	11	15	18.5	22	30	45	55	63	75	90
Back-up fuses											
gG, gL,, only if Icc>I_{cu}											
(*= No back up fuse required)											
230/240V	[A]	*	*	*	*	*	*	*	*	*	*
400/415V	[A]	*	*	*	*	*	*	*	*	*	*
440/460V	[A]	125	125	125	160	160	160	200	200	200	200
500V	[A]	100	125	125	125	160	160	160	160	160	160
690V	[A]	80	80	80	80	80	100	100	125	160	160
Ultimate short-circuit breaking capacity I_{cu}											
230/240V	[kA]	100	100	100	100	100	100	100	100	100	100
400/415V	[kA]	100	100	100	100	100	100	100	75	75	75
440/460V	[kA]	50	50	50	50	50	50	50	50	50	50
500V	[kA]	35	35	35	25	20	15	15	12	12	12
690V	[kA]	12	12	12	12	12	10	8	6	6	6
Rated service short-circuit breaking capacity I_{cs}											
230/240V	[kA]	100	100	100	100	100	100	100	100	100	100
400/415V	[kA]	100	50	50	50	50	50	50	50	50	50
440/460V	[kA]	38	38	38	38	38	38	38	38	38	38
500V	[kA]	27	27	27	19	15	11	11	9	9	9
690V	[kA]	9	9	9	9	9	8	6	6	6	6

Note) * = Short circuit proof up to 50 or 100kA.
No back up fuse required.

IEC performance data (Short-circuit protection for starters)

CARLO GAVAZZI

● GMS-32HI

Rated operational current I_e [A]		0.16	0.25	0.4	0.63	1	1.6	2.5	4	6	8	10	13	17	22	26	32
AC-2, AC-3																	
230/240V	[kW]	-	0.03	0.06	0.09	0.12	0.18/0.25	0.37	0.55/0.75	1.1/1.5	1.5	2.2/3	3	3.7/4	4	5.5	7.5
400/415V	[kW]	0.02	0.06	0.09	0.12	0.18/0.25	0.37/0.55	0.75	1.1/1.5	2.2	3	3.7/4	5.5	7.5	7.5	11	15
500V	[kW]	-	-	-	0.25	0.37	0.55/0.75	1.1	1.5/2.2	3	3.7	4/5.5	7.5	11	11	15	18.5
690V	[kW]	-	-	-	0.25	0.37/0.55	0.75/1.1	1.5	2.2/3	3.7/4	5.5	7.5	11	11	15	18.5	22
Back-up fuses																	
gG, gL,, only if Icc>I_{cu}																	
(* = No back up fuse required)																	
230/240V	[A]	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
400/415V	[A]	*	*	*	*	*	*	*	*	*	*	*	*	100	125	125	125
440/460V	[A]	*	*	*	*	*	*	*	*	*	80	80	80	80	100	100	100
500V	[A]	*	*	*	*	*	*	*	*	*	63	80	80	80	80	80	80
690V	[A]	*	*	*	*	*	*	35	40	50	63	63	63	63	63	63	63
Ultimate short-circuit breaking capacity I_{cu}																	
230/240V	[kA]	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
400/415V	[kA]	100	100	100	100	100	100	100	100	100	100	100	100	50	50	50	50
440/460V	[kA]	100	100	100	100	100	100	100	100	100	50	50	50	20	20	20	20
500V	[kA]	100	100	100	100	100	100	100	100	100	50	50	42	10	10	10	10
690V	[kA]	100	100	100	100	100	100	8	8	6	6	6	6	4	4	4	4
Rated service short-circuit breaking capacity I_{cs}																	
230/240V	[kA]	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
400/415V	[kA]	100	100	100	100	100	100	100	100	100	100	100	100	38	38	38	38
440/460V	[kA]	100	100	100	100	100	100	100	100	100	38	38	38	15	15	15	15
500V	[kA]	100	100	100	100	100	100	100	100	100	38	38	32	8	8	8	8
690V	[kA]	100	100	100	100	100	100	8	8	6	6	6	6	4	4	4	4

● GMS-63HI

Rated operational current I_e [A]		10	13	17	22	26	32	40	50	63
AC-2, AC-3										
230/240V	[kW]	2.2/3	3	3.7/4	4	5.5	7.5	7.5	11	15
400/415V	[kW]	3.7/4	5.5	7.5	7.5	11	15	18.5	22	30
500V	[kW]	4/5.5	7.5	11	11	15	18.5	22	30	37
690V	[kW]	7.5	11	11	15	18.5	22	30	45	55
Back-up fuses										
gG, gL,, only if Icc>I_{cu}										
(* = No back up fuse required)										
230/240V	[A]	*	*	*	*	*	*	*	*	*
400/415V	[A]	*	*	100	125	125	125	160	160	160
440/460V	[A]	100	100	100	125	125	125	125	125	160
500V	[A]	100	100	100	100	100	100	100	100	100
690V	[A]	63	63	63	80	80	80	80	80	80
Ultimate short-circuit breaking capacity I_{cu}										
230/240V	[kA]	100	100	100	100	100	100	100	100	100
400/415V	[kA]	100	100	50	50	50	50	50	50	50
440/460V	[kA]	50	50	50	50	35	35	35	35	35
500V	[kA]	50	42	12	12	12	10	10	10	10
690V	[kA]	6	6	5	5	5	5	5	5	5
Rated service short-circuit breaking capacity I_{cs}										
230/240V	[kA]	100	100	100	100	100	100	100	100	100
400/415V	[kA]	100	100	50	50	50	50	50	50	50
440/460V	[kA]	38	38	38	38	27	27	27	27	27
500V	[kA]	38	32	9	9	9	8	8	8	8
690V	[kA]	5	5	5	5	5	5	5	5	5

● GMS-100HI

Rated operational current I_e [A]		17	22	26	32	40	50	63	75	90	100
AC-2, AC-3											
230/240V	[kW]	3.7/4	4	5.5	7.5	7.5	11	15	22	30	30
400/415V	[kW]	7.5	7.5	11	15	18.5	22	30	37	45	45
500V	[kW]	11	11	15	18.5	22	30	37	45	55	63
690V	[kW]	11	15	18.5	22	30	45	55	63	75	90
Back-up fuses											
gG, gL,, only if Icc>I_{cu}											
(* = No back up fuse required)											
230/240V	[A]	*	*	*	*	*	*	*	*	*	*
400/415V	[A]	*	*	*	*	*	*	*	*	*	*
440/460V	[A]	125	125	125	160	160	160	200	200	200	200
500V	[A]	100	125	125	125	160	160	160	160	160	160
690V	[A]	80	80	80	80	80	100	100	125	160	160
Ultimate short-circuit breaking capacity I_{cu}											
230/240V	[kA]	100	100	100	100	100	100	100	100	100	100
400/415V	[kA]	100	100	100	100	100	100	100	75	75	75
440/460V	[kA]	50	50	50	50	50	50	50	50	50	50
500V	[kA]	35	35	35	25	20	15	15	12	12	12
690V	[kA]	12	12	12	12	12	10	8	6	6	6
Rated service short-circuit breaking capacity I_{cs}											
230/240V	[kA]	100	100	100	100	100	100	100	100	100	100
400/415V	[kA]	100	50	50	50	50	50	50	50	50	50
440/460V	[kA]	38	38	38	38	38	38	38	38	38	38
500V	[kA]	27	27	27	19	15	11	11	9	9	9
690V	[kA]	9	9	9	9	9	8	6	6	6	6

Specifications are subject to change without notice.

IEC performance data (Motor protection ; Class 20)



● GMS-63HL

Rated operational current I_e [A]		10	13	17	22	26	32	40	50	63
Switching of standard three-phase motors AC-2, AC-3										
230/240V	[kW]	2.2/3	3	3.7/4	4	5.5	7.5	7.5	11	15
400/415V	[kW]	3.7/4	5.5	7.5	7.5	11	15	18.5	22	30
500V	[kW]	4/5.5	7.5	11	11	15	18.5	22	30	37
690V	[kW]	7.5	11	11	15	18.5	22	30	45	55
Back-up fuses gG, gL,, only if $I_{cc}>I_{cu}$ (* = No back up fuse required)										
230/240V	[A]	*	*	*	*	*	*	*	*	*
400/415V	[A]	*	*	100	125	125	125	160	160	160
440/460V	[A]	100	100	100	125	125	125	125	125	160
500V	[A]	100	100	100	100	100	100	100	100	100
690V	[A]	63	63	63	80	80	80	80	80	80
Ultimate short-circuit breaking capacity I_{cu}										
230/240V	[kA]	100	100	100	100	100	100	100	100	100
400/415V	[kA]	100	100	50	50	50	50	50	50	50
440/460V	[kA]	50	50	50	50	35	35	35	35	35
500V	[kA]	50	42	12	12	12	10	10	10	10
690V	[kA]	6	6	5	5	5	5	5	5	5
Rated service short-circuit breaking capacity I_{cs}										
230/240V	[kA]	100	100	100	100	100	100	100	100	100
400/415V	[kA]	100	100	50	50	50	50	50	50	50
440/460V	[kA]	38	38	38	38	27	27	27	27	27
500V	[kA]	38	32	9	9	9	8	8	8	8
690V	[kA]	5	5	5	5	5	5	5	5	5



● GMS-100HL

Rated operational current I_e [A]		17	22	26	32	40	50	63	75	90	100
Switching of standard three-phase motors AC-2, AC-3											
230/240V	[kW]	3.7/4	4	5.5	7.5	7.5	11	15	22	30	30
400/415V	[kW]	7.5	7.5	11	15	18.5	22	30	37	45	45
500V	[kW]	11	11	15	18.5	22	30	37	45	55	63
690V	[kW]	11	15	18.5	22	30	45	55	63	75	90
Back-up fuses gG, gL,, only if $I_{cc}>I_{cu}$ (* = No back up fuse required)											
230/240V	[A]	*	*	*	*	*	*	*	*	*	*
400/415V	[A]	*	*	*	*	*	*	*	*	*	*
440/460V	[A]	125	125	125	160	160	160	200	200	200	200
500V	[A]	100	125	125	125	160	160	160	160	160	160
690V	[A]	80	80	80	80	80	100	100	125	160	160
Ultimate short-circuit breaking capacity I_{cu}											
230/240V	[kA]	100	100	100	100	100	100	100	100	100	100
400/415V	[kA]	100	100	100	100	100	100	100	75	75	75
440/460V	[kA]	50	50	50	50	50	50	50	50	50	50
500V	[kA]	35	35	35	25	20	15	15	12	12	12
690V	[kA]	12	12	12	12	12	10	8	6	6	6
Rated service short-circuit breaking capacity I_{cs}											
230/240V	[kA]	100	100	100	100	100	100	100	100	100	100
400/415V	[kA]	100	50	50	50	50	50	50	50	50	50
440/460V	[kA]	38	38	38	38	38	38	38	38	38	38
500V	[kA]	27	27	27	19	15	11	11	9	9	9
690V	[kA]	9	9	9	9	9	8	6	6	6	6

Note) * = Short circuit proof up to 50 or 100kA.
No back up fuse required.

UL/CSA performance data (Motor protection)

Manual motor controller
(UL 508, CSA C22.2 as Manual motor controllers)

● GMS-32S

Rated operational current I_e [A]		0.16	0.25	0.4	0.63	1	1.6	2.5	4	6	8	10	13	17	22	26	32
Max. short-circuit current																	
240V	[kA]	100	100	100	100	100	100	100	100	100	100	50	50	40	30	30	20
480Y/277V	[kA]	50	50	50	50	50	50	50	50	25	25	10	10	10	10	7.5	7.5
600Y/347V	[kA]	10	10	10	10	10	10	10	5	5	5	5	5	5	5	5	5
Motor load																	
1 Phase 115V	[HP]	-	-	-	-	-	-	-	1/8	1/4	1/3	1/2	1/2	1	2	2	2
230V	[HP]	-	-	-	-	-	1/10	1/6	1/3	3/4	1	1½	2	3	3	5	5
3 Phase 230V	[HP]	-	-	-	-	-	1/3	1/2	1	1½	2	3	3	5	7½	7½	10
460V	[HP]	-	-	-	-	1/2	3/4	1½	2	5	5	7½	7½	10	15	15	20
575V	[HP]	-	-	-	-	1/2	1	1½	3	5	5	10	10	15	20	20	30
Maximum rated current of fuse or breaker	[A]	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500

Manual motor controller "group installation" or "Type E starter"
(UL 508, CSA C22.2 No..14, for group installation, in connection with a short-circuit protection device)

● GMS-32H

Rated operational current I_e [A]		0.16	0.25	0.4	0.63	1	1.6	2.5	4	6	8	10	13	17	22	26	32
Max. short-circuit current																	
240V	[kA]	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
480Y/277V	[kA]	65	65	65	65	65	65	65	65	65	65	65	65	30	30	30	30
600Y/347V	[kA]	25	25	25	25	25	25	25	25	25	25	25	25	10	10	10	10
Motor load																	
1 Phase 115V	[HP]	-	-	-	-	-	-	-	1/8	1/4	1/3	1/2	1/2	1	2	2	2
230V	[HP]	-	-	-	-	-	1/10	1/6	1/3	3/4	1	1½	2	3	3	5	5
3 Phase 230V	[HP]	-	-	-	-	-	1/3	1/2	1	1½	2	3	3	5	7½	7½	10
460V	[HP]	-	-	-	-	1/2	3/4	1½	2	5	5	7½	7½	10	15	15	20
575V	[HP]	-	-	-	-	1/2	1	1½	3	5	5	10	10	15	20	20	30
Maximum rated current of fuse or breaker	[A]	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500



UL/CSA performance data (Motor protection)

Manual motor controller "group installation" or "Type E starter"
(UL 508, CSA C22.2 No.14, for group installation, in connection with a short-circuit protection device)



● GMS-63S

Rated operational current I_e		[A]	10	13	17	22	26	32	40	50	63
Max. short-circuit current											
	240V	[kA]	100	100	100	100	100	100	100	100	100
	480Y/277V	[kA]	50	50	40	40	40	40	40	40	40
	600Y/347V	[kA]	10	10	10	10	10	10	10	10	10
Motor load											
1 Phase	115V	[HP]	1/2	1/2	1	2	2	3	3	5	5
	230V	[HP]	1½	2	3	3	5	5	7½	10	15
3 Phase	230V	[HP]	3	3	5	7½	10	10	15	15	20
	460V	[HP]	7½	7½	10	15	20	25	30	40	50
	575V	[HP]	10	10	15	20	25	30	40	50	60
Maximum rated current of fuse or breaker		[A]	600	600	600	600	600	600	600	600	600



● GMS-63H

Rated operational current I_e		[A]	10	13	17	22	26	32	40	50	63
Max. short-circuit current											
	240V	[kA]	100	100	100	100	100	100	100	100	100
	480Y/277V	[kA]	65	65	50	50	50	50	50	50	50
	600Y/347V	[kA]	25	25	10	10	10	10	10	10	10
Motor load											
1 Phase	115V	[HP]	1/2	1/2	1	2	2	3	3	5	5
	230V	[HP]	1½	2	3	3	5	5	7½	10	15
3 Phase	230V	[HP]	3	3	5	7½	10	10	15	15	20
	460V	[HP]	7½	7½	10	15	20	25	30	40	50
	575V	[HP]	10	10	15	20	25	30	40	50	60
Maximum rated current of fuse or breaker		[A]	600	600	600	600	600	600	600	600	600

Manual motor controller "group installation" or "Type E starter"
(UL 508, CSA C22.2 No..14, for group installation, in connection with a short-circuit protection device)



● GMS-100S

Rated operational current I_e		[A]	17	22	26	32	40	50	63	75	90	100
Max. short-circuit current												
	240V	[kA]	100	100	100	100	100	100	100	100	100	100
	480Y/277V	[kA]	50	50	50	50	50	50	40	40	40	40
	600Y/347V	[kA]	10	10	10	10	10	10	10	10	10	10
Motor load												
1 Phase	115V	[HP]	1	1½	2	3	3	5	5	7½	10	10
	230V	[HP]	3	3	5	5	7½	10	15	15	20	20
3 Phase	230V	[HP]	5	7½	10	10	15	15	20	25	30	40
	460V	[HP]	10	15	20	25	30	40	50	60	75	75
	575V	[HP]	15	20	25	30	40	50	60	75	100	100
Maximum rated current of fuse or breaker		[A]	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000



● GMS-100H

Rated operational current I_e		[A]	17	22	26	32	40	50	63	75	90	100
Max. short-circuit current												
	240V	[kA]	100	100	100	100	100	100	100	100	100	100
	480Y/277V	[kA]	65	65	65	65	65	65	50	50	50	50
	600Y/347V	[kA]	25	20	20	20	20	20	10	10	10	10
Motor load												
1 Phase	115V	[HP]	1	1½	2	3	3	5	5	7½	10	10
	230V	[HP]	3	3	5	5	7½	10	15	15	20	20
3 Phase	230V	[HP]	5	7½	10	10	15	15	20	25	30	40
	460V	[HP]	10	15	20	25	30	40	50	60	75	75
	575V	[HP]	15	20	25	30	40	50	60	75	100	100
Maximum rated current of fuse or breaker		[A]	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000

● GMS-32S

Rated operational current I_e		[A]	0.16	0.25	0.4	0.63	1	1.6	2.5	4	6	8	10	13	17	22	26	32
Max. short-circuit current																		
	240V	[kA]	100	100	100	100	100	100	100	100	100	100	50	50	40	30	30	20
	480Y/277V	[kA]	50	50	50	50	50	50	50	50	25	25	10	10	10	10	7.5	7.5
	600Y/347V	[kA]	10	10	10	10	10	10	10	5	5	5	5	5	5	5	5	5
Motor load																		
1 Phase	115V	[HP]	-	-	-	-	-	-	-	1/8	1/4	1/3	1/2	1/2	1	2	2	2
	230V	[HP]	-	-	-	-	-	1/10	1/6	1/3	3/4	1	1½	2	3	3	5	5
3 Phase	230V	[HP]	-	-	-	-	-	1/3	1/2	1	1½	2	3	3	5	7½	7½	10
	460V	[HP]	-	-	-	-	1/2	3/4	1½	2	5	5	7½	7½	10	15	15	20
	575V	[HP]	-	-	-	-	1/2	1	1½	3	5	5	10	10	15	20	20	30
Max. fuse size		[A]	1	1	1	1	3	6	10	15	20	30	40	50	60	80	100	125
Max. breaker size		[A]	15	15	15	15	15	15	15	15	20	30	40	50	60	80	100	125

● GMS-32H

Rated operational current I_e		[A]	0.16	0.25	0.4	0.63	1	1.6	2.5	4	6	8	10	13	17	22	26	32
Max. short-circuit current																		
	240V	[kA]	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
	480Y/277V	[kA]	50	50	50	50	50	50	50	50	50	50	50	50	30	30	30	30
	600Y/347V	[kA]	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Motor load																		
1 Phase	115V	[HP]	-	-	-	-	-	-	-	1/8	1/4	1/3	1/2	1/2	1	2	2	2
	230V	[HP]	-	-	-	-	-	1/10	1/6	1/3	3/4	1	1½	2	3	3	5	5
3 Phase	230V	[HP]	-	-	-	-	-	1/3	1/2	1	1½	2	3	3	5	7½	7½	10
	460V	[HP]	-	-	-	-	1/2	3/4	1½	2	5	5	7½	7½	10	15	15	20
	575V	[HP]	-	-	-	-	1/2	1	1½	3	5	5	10	10	15	20	20	30
Max. fuse size		[A]	1	1	1	1	3	6	10	15	20	30	40	50	60	80	100	125
Max. breaker size		[A]	15	15	15	15	15	15	15	15	20	30	40	50	60	80	100	125

● GMS-63S

Rated operational current I_e		[A]	10	13	17	22	26	32	40	50	63
Max. short-circuit current											
	240V	[kA]	100	100	100	100	100	100	100	100	100
	480Y/277V	[kA]	25	25	25	25	25	25	25	25	25
	600Y/347V	[kA]	10	10	10	10	10	10	10	10	10
Motor load											
1 Phase	115V	[HP]	1/2	1/2	1	2	2	3	3	5	5
	230V	[HP]	1½	2	3	3	5	5	7½	10	15
3 Phase	230V	[HP]	3	3	5	7½	10	10	15	15	20
	460V	[HP]	7½	7½	10	15	20	25	30	40	50
	575V	[HP]	10	10	15	20	25	30	40	50	60
Max. fuse size		[A]	40	50	60	80	100	125	150	200	250
Max. breaker size		[A]	40	50	60	80	100	125	150	200	250







● GMS-63H

Rated operational current I_e		[A]	10	13	17	22	26	32	40	50	63
Max. short-circuit current											
	240V	[kA]	100	100	100	100	100	100	100	100	100
	480Y/277V	[kA]	50	50	50	50	50	50	50	50	50
	600Y/347V	[kA]	10	10	10	10	10	10	10	10	10
Motor load											
1 Phase	115V	[HP]	1/2	1/2	1	2	2	3	3	5	5
	230V	[HP]	1½	2	3	3	5	5	7½	10	15
3 Phase	230V	[HP]	3	3	5	7½	10	10	15	15	20
	460V	[HP]	7½	7½	10	15	20	25	30	40	50
	575V	[HP]	10	10	15	20	25	30	40	50	60
Max. fuse size		[A]	40	50	60	80	100	125	150	200	250
Max. breaker size		[A]	40	50	60	80	100	125	150	200	250

● GMS-100S

Rated operational current I_e		[A]	17	22	26	32	40	50	63	75	90	100
Max. short-circuit current												
	240V	[kA]	100	100	100	100	100	100	100	100	100	100
	480Y/277V	[kA]	25	25	25	25	25	25	25	25	25	25
	600Y/347V	[kA]	10	10	10	10	10	10	10	10	10	10
Motor load												
1 Phase	115V	[HP]	1	1½	2	3	3	5	5	7½	10	10
	230V	[HP]	3	3	5	5	7½	10	15	15	20	20
3 Phase	230V	[HP]	5	7½	10	10	15	15	20	25	30	40
	460V	[HP]	10	15	20	25	30	40	50	60	75	75
	575V	[HP]	15	20	25	30	40	50	60	75	100	100
Max. fuse size		[A]	60	80	100	125	150	200	250	300	350	400
Max. breaker size		[A]	60	80	100	125	150	200	250	300	350	400

● GMS-100H

Rated operational current I_e		[A]	17	22	26	32	40	50	63	75	90	100
Max. short-circuit current												
	240V	[kA]	100	100	100	100	100	100	100	100	100	100
	480Y/277V	[kA]	50	50	50	50	50	50	50	50	50	50
	600Y/347V	[kA]	10	10	10	10	10	10	10	10	10	10
Motor load												
1 Phase	115V	[HP]	1	1½	2	3	3	5	5	7½	10	10
	230V	[HP]	3	3	5	5	7½	10	15	15	20	20
3 Phase	230V	[HP]	5	7½	10	10	15	15	20	25	30	40
	460V	[HP]	10	15	20	25	30	40	50	60	75	75
	575V	[HP]	15	20	25	30	40	50	60	75	100	100
Max. fuse size		[A]	60	80	100	125	150	200	250	300	350	400
Max. breaker size		[A]	60	80	100	125	150	200	250	300	350	400

General data






Type			GMS-32S	GMS-32H	GMS-63S, 63H	GMS-100S,100H
Rated insulation voltage						
	IEC		690V	690V	1000V	1000V
	UL, CSA		600V	600V	600V	600V
Rated impulse withstand voltage						
Uimp/Pollution degree			6kV / 3	6kV / 3	8kV / 3	8kV / 3
Rated frequency			50 / 60 Hz	50 / 60 Hz	50 / 60 Hz	50 / 60 Hz
Utilization category:						
IEC 947-2 (Circuit breaker)			Cat. A	Cat. A	Cat. A	Cat. A
IEC 947-4-1 (Motor starter)			AC 3	AC 3	AC 3	AC 3
Life span						
Mechanical		Operations	100,000	100,000	50,000	50,000
Electrical(Ie max.)		Operations	100,000	100,000	25,000	25,000
Switching frequency		Ope./h	25	25	25	25
Ambient temperature						
	Storage	℃	-50 ~ +80	-50 ~ +80	-50 ~ +80	-50 ~ +80
	Operation	℃	-20 ~ +60	-20 ~ +60	-20 ~ +60	-20 ~ +60
Operation altitude		m	Up to 2000 (6500 Feet)	Up to 2000 (6500 Feet)	Up to 2000 (6500 Feet)	Up to 2000 (6500 Feet)
Protection class			IP 20 Safe from finger touch	IP 20 Safe from finger touch	IP 20 Safe from finger touch	IP 20 Safe from finger touch
Resistance to shock		g	25	25	25	25
Resistance to vibration		Hz	5 ~ 150	5 ~ 150	5 ~ 150	5 ~ 150
Rated thermal current Ith						
IEC up to 60℃ ambient temperature		[A]	0.1 ... 32	0.1 ... 32	6 ...63	11 ...100
Overload protection Characteristics			○	○	○	○
Ambient temperature compensation, thermal current Ith adjustments		-20°C ~ -5°C -5°C ~ +40°C +40°C ~ +60°C	set one point lower [3] automatic set one point higher [3]	set one point lower [3] automatic set one point higher [3]	set one point lower [3] automatic set one point higher [3]	set one point lower [3] automatic set one point higher [3]
Phase-failure protection			○	○	○	○
Trip class		IEC 60947-4-1	10	10	10 [1]	10 [1]
Magnetic release Response current			13 × In [2]	13 × In [2]	13 × In [2]	13 × In [2]
Total power loss Pv						
Circuit breaker at rated load		[W]	In = 0.16~4A : 9.8	In = 0.16~4A : 9.8	In = 10~22A : 13.3	In = 17~63A : 11.9
Operating temperature			In = 6~26A : 8 In = 32A : 3.9	In = 6~26A : 8 In = 32A : 3.9	In = 26~63A : 12.6	In = 75~100A : 15

Note = 1) Class20; GMS-63HL, GMS-100HL
2) In = Max. rated operational current Ie
3) use Thermal Current dial to adjust accordingly

Specifications are subject to change without notice.

● Manual Motor Starter GMS-32...100

		GMS-32S	GMS-32H	GMS-32S, 63H	GMS-100S, 100H
Conformity to standards		IEC60947 UL508, UL508 Type E			
Approvals		CE, UL			
Terminal parts					
Screwdriver					
Single-core	1.conductor [mm²] / [AWG]	1...10 / 18...8	1...10 / 18...8	0.75...35 / 18...2	2.5...70 / 12...2/0
	2.conductor [mm²] / [AWG]	1...6 / 18...10	1...6 / 18...10	0.75...25 / 18...4	2.5...50 / 12...1/0
Stranded	1.conductor [mm²] / [AWG]	1...6 / 18...10	1...6 / 18...10	0.75...35 / 18...2	2.5...70 / 12...2/0
	2.conductor [mm²] / [AWG]	1...6 / 18...10	1...6 / 18...10	0.75...25 / 18...4	2.5...50 / 12...1/0
Flexible	1.conductor [mm²] / [AWG]	1...6 / 18...10	1...6 / 18...10	0.75...25 / 18...4	2.5...50 / 12...1/0
	2.conductor [mm²] / [AWG]	0.75...4 / 18...10	0.75...4 / 18...10	0.75...16 / 18...6	2.5...35 / 10...2
Tightening torque [Nm] / [lb-in]		0.8...2.5 / 7...22	0.8...2.5 / 7...22	3...4.5 / 26...39	4...6 / 35...53

● Accessories for Manual Motor Starter GMS-32...100

		Auxiliary contacts for front mounting GFX...		Auxiliary contacts for left side mounting GSX...		Alarm switch for left side mounting GSA...	
Rated thermal current / th							
at 40℃ ambient temperature	[A]	5		1 0		1 0	
at 60℃ ambient temperature	[A]	3		6		6	
Contact class coordination according to NEMA							
(UL/CSA-Standards)	AC	B 600 Standard Pilot Duty		A 600 Standard Pilot Duty		A 600 Standard Pilot Duty	
	DC	R 300 Light Pilot Duty		Q 300 Light Pilot Duty		Q 300 Light Pilot Duty	
Back-up fuses gG, gL	[A]	16		1 6		1 6	
Rated supply current	[V]	24	240	24	240	24	240
AC-15:	[A]	3	2	6	4	6	4
DC-13:	[V]	24	220	24	220	24	220
	[A]	1	0.1	2	0.25	2	0.25
Terminal parts							
Type of terminals							
Screwdriver				Pozidriv size 2			
Single-core 1.conductor	[mm²] / [AWG]			0.5...2.5 / 20...14			
2.conductor	[mm²] / [AWG]			0.5...2.5 / 20...14			
Flexible 1.conductor	[mm²] / [AWG]			0.5...4 / 20...10			
2.conductor	[mm²] / [AWG]			0.75...2.5 / 18...14			
Tightening torque	[Nm] / [lb-in]			0.8...1.2 / 7...10			

● Accessories for Manual Motor Starter GMS-32...100

		Undervoltage release for right side mounting GUR...	Undervoltage release with 2 auxiliary contacts for right side mounting GURX...	Shunt release for right side mounting GSR...
Actuating voltage				
Pull-in		0.85...1.1 × Us	0.85...1.1 × Us	0.7...1.1 × Us
Drop-out		0.7...0.35 × Us	0.7...0.35 × Us	
Rated control voltage				
min.:		24V 50Hz / 28V 60Hz	24V 50Hz / 28V 60Hz	24V 50Hz / 28V 60Hz
max.:		415~440V 50Hz / 460~480V 60Hz	415~440V 50Hz / 460~480V 60Hz	415~440V 50Hz / 460~480V 60Hz
Coil rating				
Pull-in		8.5VA, 6W	8.5VA, 6W	8.5VA, 6W
Hold		3VA, 1.2W	3VA, 1.2W	3VA, 1.2W
On-Time		100%	100%	100%
Terminal parts				
Type of terminals				
Screwdriver			Pozidriv size 2	
1.conductor	[mm²] / [AWG]		0.5...2.5 / 20...14	
2.conductor	[mm²] / [AWG]		0.5...2.5 / 20...14	
1.conductor	[mm²] / [AWG]		0.5...4 / 20...10	
2.conductor	[mm²] / [AWG]		0.75...2.5 / 18...14	
Tightening torque	[Nm] / [lb-in]		0.8...1.2 / 7...10	

● Weights

Description	Type	Weight [g]
Circuit breaker	**GMS-32S**	320
	GMS-32H	360
	GMS-63S	1,000
	GMS-100S	2,200
Auxiliary switch	**GFX...**(Front Auxiliary Switch)	18
	GSX...(Side Auxiliary Switch)	30
	GSA...(Alarm Switch)	40
Undervoltage release	**GUR...** (Undervoltage release)	110
	GURX... (Undervoltage release with 2 auxiliary contacts)	120
Shunt release	**GSR...** (Shunt release)	110

Type '2' coordination according to IEC 947-4-1

● **Short-circuit current Iq = 50kA**
Voltage : 400/415V, 50/60Hz

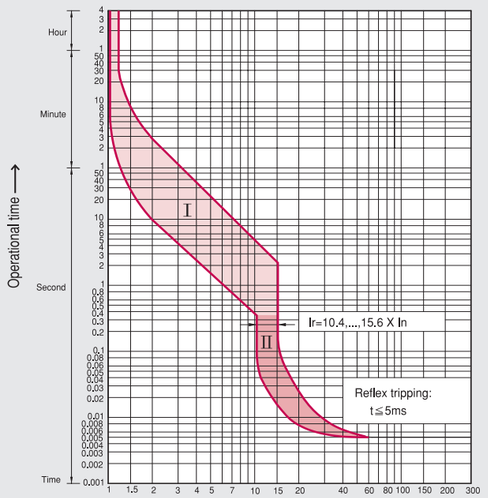
Standard motors AC-3 at 400/415V 1500rpm		Manual motor starter			Contactor	
		Circuit breaker	Thermal overload release setting range	Magnetic release response current		
[kW]	[A]	Type	[A]	[A]	Type	[A]
0.06	0.24	GMS-32S 0.25A	0.16 ~0.25	3.25	CGMS-6	6
0.09	0.33	GMS-32S 0.4A	0.25~0.4	5.2	CGMS-6	6
0.12	0.43	GMS-32S 0.63A	0.4~0.63	8.19	CGMS-6	6
0.18	0.61	GMS-32S 0.63A	0.4~0.63	8.19	CGMS-6	6
0.25	0.8	GMS-32S 1A	0.63~1	13	CGMS-6	6
0.37	1.1	GMS-32S 1.6A	1~1.6	20.8	CGMS-6	6
0.55	1.5	GMS-32S 1.6A	1~1.6	20.8	CGMS-6	6
0.75	1.9	GMS-32S 2.5A	1.6~2.5	32.5	CGMS-9/CGC-9	9
1.1	2.7	GMS-32S 4A	2.5~4	52	CGMS-9/CGC-9	9
1.5	3.5	GMS-32S 4A	2.5~4	52	CGMS-12/CGC-12	12
2.2	5.0	GMS-32S 6A	4~6	78	CGC-18	18
3.0	6.6	GMS-32S 8A	5~8	104	CGC-18	18
4.0	8.5	GMS-32S 10A	6~10	130	CGC-18	18
5.5	11.0	GMS-32S 13A	9~13	169	CGC-22	22
7.5	15.0	GMS-32H 17A	11~17	221	CGC-22	22
10.0	20.0	GMS-32H 22A	14~22	286	CGC-32	32
11.0	22.0	GMS-32H 26A	18~26	338	CGC-32	32
15.0	29.0	GMS-32H 32A	22~32	416	CGC-32	32
18.5	36.0	GMS-63S 40A	28~40	520	CGC-50	50
22.0	41.0	GMS-63S 50A	34~50	650	CGC-50	50
30.0	56.0	GMS-63S 63A	45~63	819	CGC-65	65
37.0	68.0	GMS-100S 75A	55~75	975	CGC-75	75
-	-	GMS-100S 90A	70~90	1170	CGC-85	85
45.0	81.0	GMS-100S 100A	80~100	1300	CGC-85	85

Definition type '2' coordination according to IEC 947-4-1

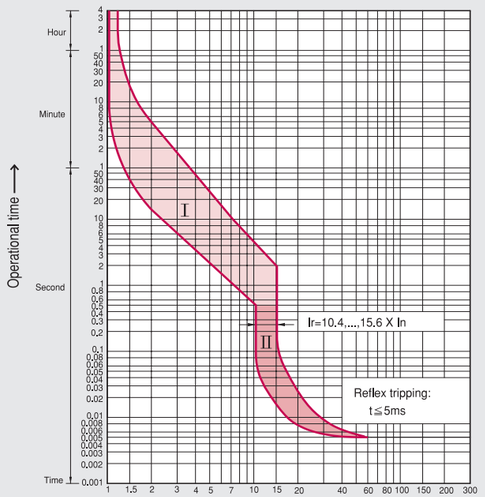
- The contactor or the starter must not endanger persons or systems in the event of a short-circuit.
- The contactor or the starter must be suitable for further use.
- No damage to the overload relay or other parts may occur with the exception of welding of the contactor or starter contacts provided that these can be easily separated without significant deformation (such as with a screwdriver).

Time/Current characteristic

GMS-32S, H



GMS-63S, H / GMS-100S, H



Ⅰ) Thermal release trip current :

The adjustable inverse bimetal trip reliability protects motors against overloads.
The curve shows the mean operating current at an ambient temperature of 20℃ starting from cold.
Careful testing and setting ensures effective motor protection even in the case of single-phasing.

Ⅱ) Magnetic release trip current :

The instantaneous magnetic trip has a fixed operating current setting.
This corresponds to 13times the maximum value of setting range,
at a lower setting it is correspondingly higher.

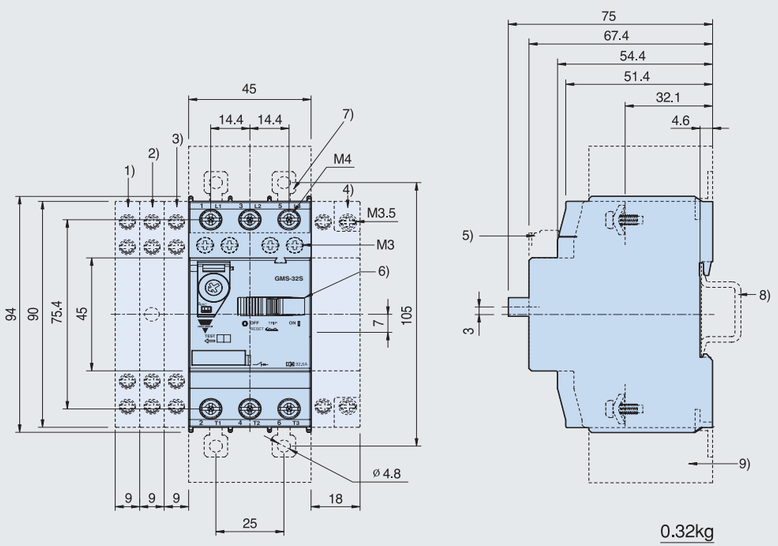
Current setting Ie :

The overload trip corresponds to a thermal overload relay in a motor starter conforming to IEC 947-4-1.
If a different value is prescribed (e.g. reduced Ie for cooling medium having a temperature higher
than 40℃ or a place of installation higher than 2000m above sea level),
the setting current is equal to the reduced rated current Ie of the motor.

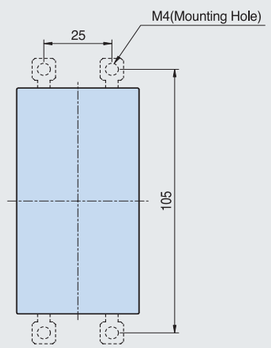
Dimensions

● GMS-32S

[mm]



0.32kg



Height of arcing spaces
(Clearance from earthed parts)

Ue[V]	240	415	460	525	690
[mm]	20	20	20	20	20

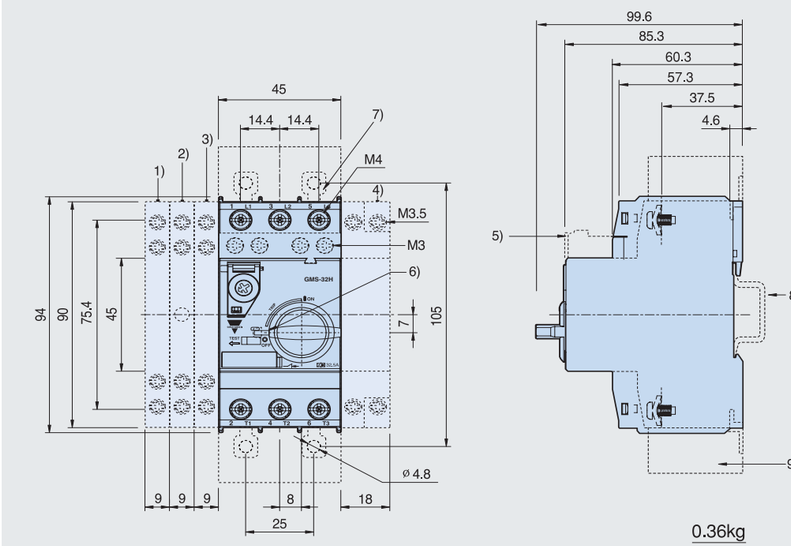
Arcing spaces for limiter function

Ue[V]	525		690	
	left/right	top/bottom	left/right	top/bottom
[mm]	10	40	30	50

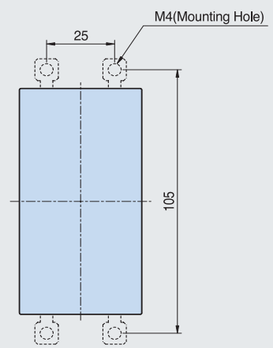
1) Side auxiliary switch
2) Side magnetic trip alarm switch
3) Side any trip alarm switch
4) Side shunt release or Side undervoltage release
5) Front auxiliary switch
6) Handle lock in OFF position(ø 5mm)
7) Push-in Lugs for screw mounting
8) 35mm standard mounting rail acc. to EN 50 022
9) Arcing space

● GMS-32H, 32HI

[mm]



0.36kg



Height of arcing spaces
(Clearance from earthed parts)

Ue[V]	240	415	460	525	690
[mm]	30	30	30	30	50

Arcing spaces for limiter function

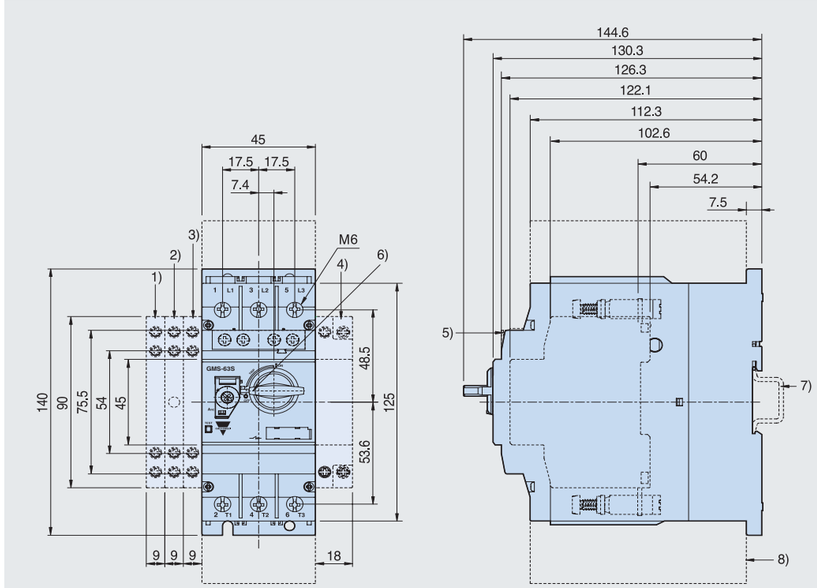
Ue[V]	525		690	
	left/right	top/bottom	left/right	top/bottom
[mm]	10	40	30	50

1) Side auxiliary switch
2) Side magnetic trip alarm switch
3) Side any trip alarm switch
4) Side shunt release or Side undervoltage release
5) Front auxiliary switch
6) Handle lock in OFF position(ø 5mm)
7) Push-in Lugs for screw mounting
8) 35mm standard mounting rail acc. to EN 50 022
9) Arcing space

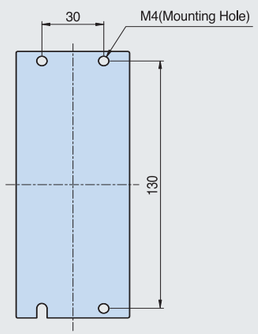
Dimension

● GMS-63S, 63H, 63HI, 63HL

[mm]



1kg



Height of arcing spaces
(Clearance from earthed parts)

Ue[V]	240	415	460	525	690
[mm]	50	50	50	50	50

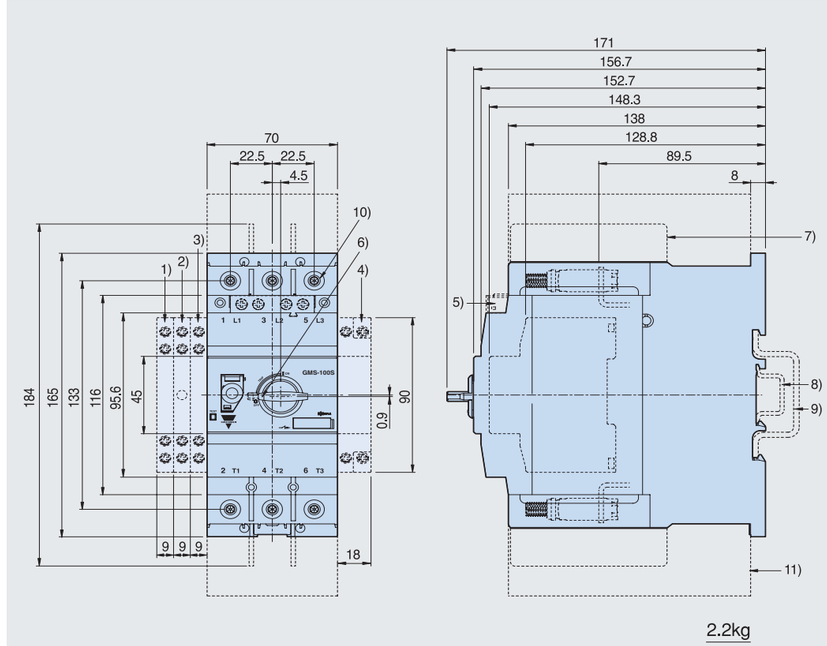
Arcing spaces for limiter function

Ue[V]	525		690	
	left/right	top/bottom	left/right	top/bottom
[mm]	10	50	10	50

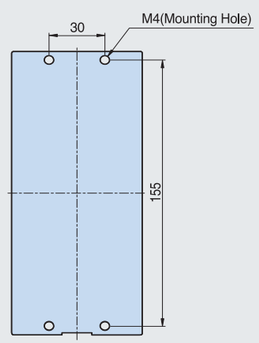
1) Side auxiliary switch
2) Side magnetic trip alarm switch
3) Side any trip alarm switch
4) Side shunt release or Side undervoltage release
5) Front auxiliary switch
6) Handle lock in OFF position(⌀ 5mm)
7) 35mm standard mounting rail acc. to EN 50 022
8) Arcing space

● GMS-100S, 100H, 100HI, 100HL

[mm]



2.2kg



Height of arcing spaces
(Clearance from earthed parts)

Ue[V]	240	415	460	525	690
[mm]	50	70	70	110	150

Arcing spaces for limiter function

Ue[V]	525		690	
	left/right	top/bottom	left/right	top/bottom
[mm]	10	110	30	150

1) Side auxiliary switch
2) Side magnetic trip alarm switch
3) Side any trip alarm switch
4) Side shunt release or Side undervoltage release
5) Front auxiliary switch
6) Handle lock in OFF position(⌀ 5mm)
7) Insulation barrier
8) 35mm standard mounting rail acc. to EN 50 022
9) 75mm standard mounting rail acc. to EN 50 023
10) 4mm hexagon socket screw
11) Arcing space

Notes:

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Circuit and Motor Protection
Soft Starters
Variable Frequency Drives
Hybrid Relays
Electromechanical Relays
Limit Switches
Push Buttons and Pilot Lights

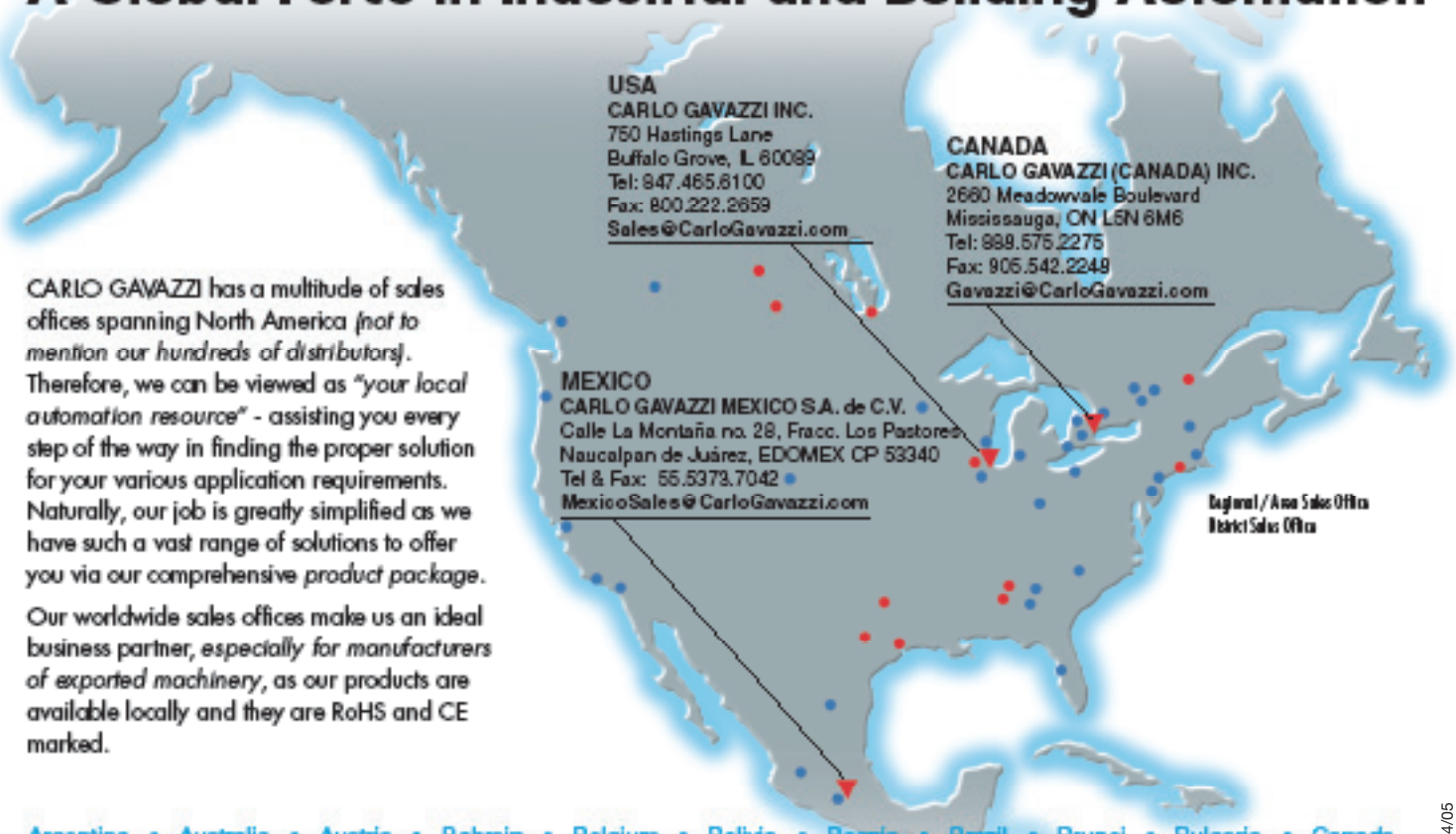
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