

Gruppi statici con controllo analogico della potenza model . **Gp3 MULTIFUNZIONE**
senza **DIAGNOSTICA 48- 440 e (500VAC a richiesta) 50/60Hz. signal 0-10VDC / PWM 12-24VDC 1" Ciclo.**

Static groups with analogical control of the power model. **Gp3 MULTIFUNCTION**
without **DIAGNOSTICS 48-440 and (500VAC on request) 50 / 60Hz. signal 0-10VDC / PWM 12-24VDC 1" CYCLE.**



UL E72873
IEC269/4 UL.R USA508



* fusibili extrarapidi incorporati
* built-in high-speed fuses

DIAGNOSTICA:
rottura del carico totale
rottura del fusibile
rottura del semiconduttore

DIAGNOSTICS:
rupture of the total load
fuse blow
rupture of the semiconductor

* Tensione nominale 48-440 vac
* Rated operational voltage : 48-440vac
* su richiesta 500vac
* on request 500vac
* Grado di protezione Ip20
* Ip20 Protection
* Controllo delle resistenze **Zero crossing**
* **Zero crossing** control of heaters
* Controllo ad **angolo di fase** funzione 3 e 4
* **Phase angle** control function 3 and 4
* Allarme rottura fusibile - mancanza linea -
rottura del carico.
* Fuse breakage alarm - line failure -
load breakage

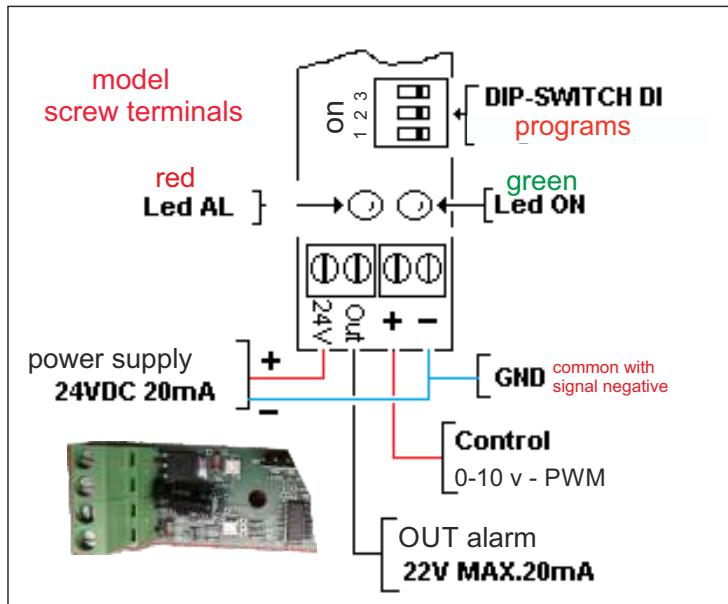
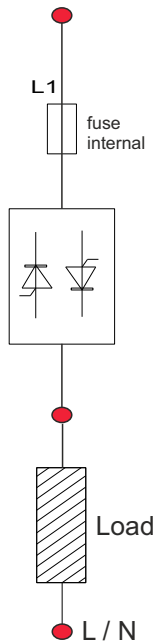
I relè allo stato solido trovano particolare applicazione dove è richiesta una elevata frequenza di commutazione unita anche alla possibilità di commutare correnti elevate.
Inoltre una totale tollerabilità alle vibrazioni all'ossidazione, agli urti meccanici e non danno origine né ad archi. I relè a commutazione di zero innescano quando la tensione di uscita passa in prossimità dello zero e disinnescano sempre a corrente zero

Solid state relays have particular application where a high frequency of is required switching combined with the possibility of switching high currents.
Moreover a total tolerability to the oxidation vibrations, to the mechanical impacts and they do not give origin neither to arches.
Zero-switching relays trigger when the output voltage passes near zero e always defuse at zero current

Tabella modelli monofasi / Single-phase models table

Amp	H	L	P	FORCED AIR	ITEM	WEIGHT KG	FUSE	ISOLATION VAC	POWER LOSS	Ripetitive peak 500V	Latching current mA	i2T KA for fusing 10mSec.	frequency	figura picture
27A	195	78	138		6005GP3	1	45	2500	29+9 Fuse	1600	500	0.45	50-60	F1
55A	195	78	138		6010GP3	1	85	2500	58+20 Fuse	1600	500	3.9	50-60	F1
65A	200	78	138		6013GP3	2.8	85	2500	88+33 Fuse	1600	500	6.2	50-60	F2
85A	340	145	165		6015GP3	1.1	100	2500	88+33 Fuse	1600	500	6.2	50-60	F4
85AF	200	145	138	yes	6017GP3	1.2	100	2500	88+33 Fuse	1600	500	6.2	50-60	F3
125	340	145	165	yes	6020GP3	3.5	165	2500	132+46 Fuse	1600	500	8.9	50-60	F7
165	340	145	165	yes	6025GP3	3.5	180	2500	174+50 Fuse	1600	500	13.5	50-60	F7
225	440	145	165	yes	6030GP3	4.5	250	2500	234+59 Fuse	1600	500	43	50-60	F7
300	440	145	165	yes	6035GP3	4.5	350	2500	300+80 Fuse	1600	500	105	50-60	F7
400	500	210	280	yes	6040GP3	9	2X250	2500	426+110 Fuse	1600	500	150	50-60	F8
600	650	210	280	yes	6045GP3	12	3X250	2500	624+165 Fuse	1600	500	337	50-60	F8
800	610	280	300	yes	6050GP3	14	3X315	2500	864+210 Fuse	1600	500	693	50-60	F9
1000	710	280	270	yes	6055GP3	16	4X280	2500	1080+260 Fuse	1600	500	1265	50-60	F9
125	340	127	218	yes	6023GP3	8	165	2500	132+46 Fuse	1600	500	8.9	50-60	F5
165	340	127	218	yes	6027GP3	8	180	2500	174+50 Fuse	1600	500	13.5	50-60	F5
225	340	127	218	yes	6033GP3	8	250	2500	234+59 Fuse	1600	500	43	50-60	F5
300	340	127	218	yes	6037GP3	8	350	2500	300+80 Fuse	1600	500	105	50-60	F5

Schema di collegamento interno / internal Wiring Diagram



DATI TECNICI COMUNI:

- ALIMENTAZIONE 24V DC ,
- TEMPO ATTIVAZIONE 2Sec.
- ASSORBIMENTO 18mA .
- SEGNALE DI CONTROLLO LOGICO 11-24V DC 5mA.
- MINIMO IMPULSO CONSIDERATO 20mS.
- segnale 0-10vdc assorbimento 2mA
- OUT ALLARME 22V DC MAX.20mA CON DIODO INTERNO PER COLLEGAMENTO IN PARALLELO TEMPO DI INTERVENTO 2Sec.

COMPORTAMENTO DELLA DIAGNOSTICA:

Quando si alimenta il trigger e non è ancora presente la tensione del carico da controllare, il dispositivo di diagnostica (in questo caso è come fosse una rottura del fusibile o mancanza del carico) da allarme . Se il dispositivo è in allarme il segnale di controllo non viene considerato bisogna ripristinare il guasto .

1	Function with signal PWM zero-crossing		application : single -phase double-single phase three-single phase Load star or triangle	3	Function with signal PWM 1" phase-angle		application : solo monofasi single -phase
	Cycle time 62ms 125 - 187-250 312- 375-437-500-562-625-687 750-812-875-937-1"				4	Function with signal 0-10V phase-angle	
2	Function with signal 0-10V zero-crossing cycle time 1"			A	Line 60hz		
					B	Line 50hz	

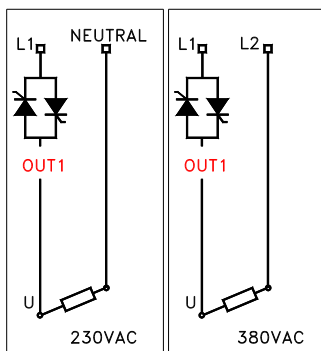
PROGRAMMI :

- FUNZIONE 1:** Dip 2 (off), Dip 3 (off). IL relè commuta a **zero-crossing** con segnale Pwm 7-24vdc .
FUNZIONE 2: Dip 2 (off), Dip 3 (ON). IL relè commuta a **zero-crossing** con segnale 0-10V.

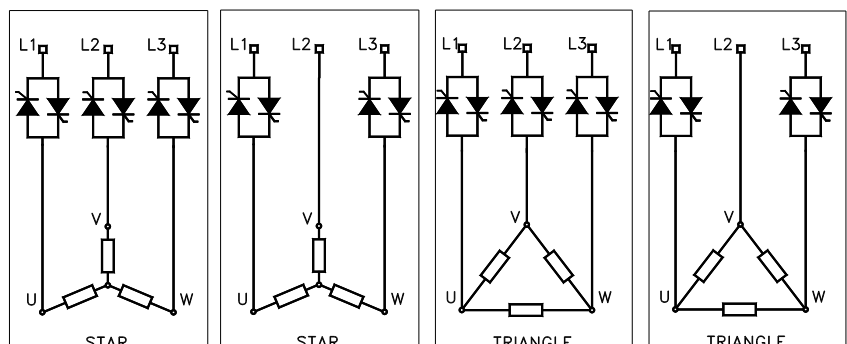
Solo per applicazioni monofasi

- FUNZIONE 3:** Dip 2 (oN), Dip 3 (OFF). Questa funzione richiede un tempo di ciclo "SSR" 7-24vdc fisso di 1 sec. . Il relè aziona ad "angolo di fase" convertendo il segnale di controllo SSR in un riferimento preciso in % . Si comporta come un normale controllo ad angolo di fase, eseguendo il soft alla partenza da 0 a 100% con un tempo di 2 Sec. Auto soft in caso di mancanza transitoria della tensione di linea.
FUNZIONE 4: Dip 2 (on), Dip 3 (On). Questa funzione richiede segnale 0-10vdc Il relè aziona ad **angolo di fase** Si comporta come un normale controllo ad angolo di fase, eseguendo il soft alla partenza da 0 a 100% con un tempo di 2 Sec. Auto soft in caso di mancanza transitoria della tensione di linea. L'allarme non viene considerato alle seguenti tensioni del segnale 0-10vdc minimo 0-2.5vdc e massimo 8v10vdc.

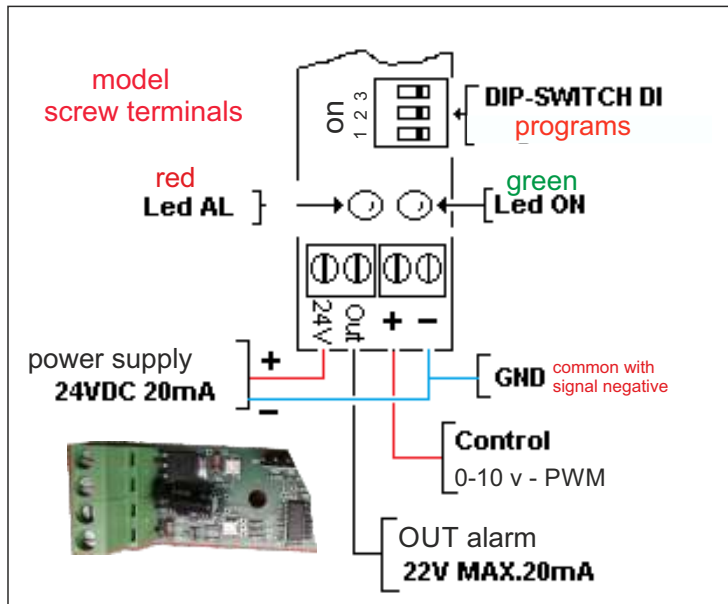
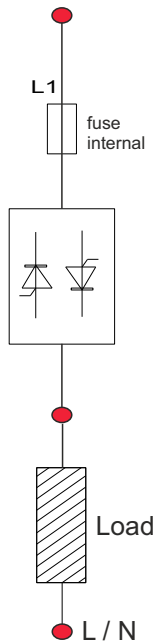
Function 1-2-3-4



Function 1-2



Schema di collegamento interno / internal Wiring Diagram



TECHNICAL DATA COMMON:
 - POWER 24V DC, TIME ACTIVATION 2Sec.
 - Absorption 18mA.
 - CONTROL SIGNAL LOGIC 11-24V DC 5mA.
 - Signal 0-10vdc absorption 2mA
 - MINIMUM PULSE CONSIDERED 20mS.
 - ALARM OUT 22V DC MAX.20mA WITH INTERNAL DIODE FOR PARALLEL CONNECTION TIME FOR ACTION 2Sec.

BEHAVIOR OF THE DIAGNOSTICS:
 When you power the trigger and it's not load voltage still present to check, the device of diagnostics (in this case it is like it is a breakdown of the fuse or load failure) due to alarm. If the device is in alarm the signal control is not considered the fault must be reset.

1	Function with signal PWM zero-crossing		application : single -phase double-single phase three-single phase	3	Function with signal PWM 1" phase-angle		application : solo monofasi single -phase
	Cycle time 62ms 125 - 187-250 312- 375-437-500-562-625-687 750-812-875-937-1"	Load star or triangle			4	Function with signal 0-10V phase-angle	
2	Function with signal 0-10V zero-crossing cycle time 1"		A	B	Line 60hz		
					Line 50hz		

DIP-SWITCH located on the board, you can set four different operating methods .

PROGRAMS:

FEATURE 1: Dip 2 (off), Dip 3 (off). THE relay switches at zero-crossing with PWM signal 7-24vdc.

FUNCTION 2: Dip 2 (off), Dip 3 (ON). THE relay switches at zero-crossing with 0-10V signal.

Only for single-phase

FUNCTION 3: Dip 2 (oN), Dip 3 (OFF). This feature requires a cycle time "SSR" fixed 7-24vdc of 1 sec. .

The relay operates to "phase angle" converting the SSR control signal in a precise reference in%.

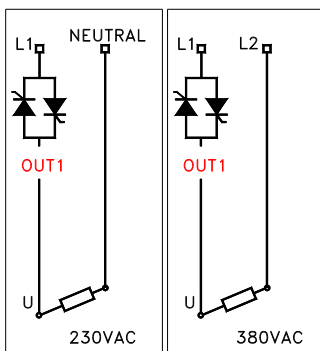
It behaves like a normal control of phase angle, executing the soft at the start of 0 to 100% with a 2 Sec time. Auto soft in case of line voltage.

FUNCTION 4: Dip 2 (on), Dip 3 (On). This feature requires signal 0-10Vdc The relay operates phase angle

It behaves like a normal control of phase angle, executing the soft at the start of 0 to 100% with a 2 Sec time. Auto soft in case of transitory lack of line voltage The alarm is not considered

0-10Vdc signal to the following functions minimum 0-2.5vdc and maximum 8-10vdc.

Function 1-2-3-4



Function 1-2

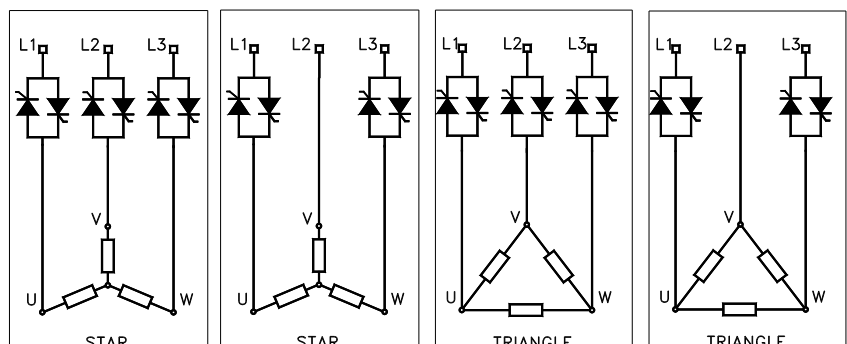


Tabella modelli doppio -monofasi / double -Single-phase models table

dimension doppio monofase / double single - phase
Dualphasen / dual-phase / De doble fase / biphase

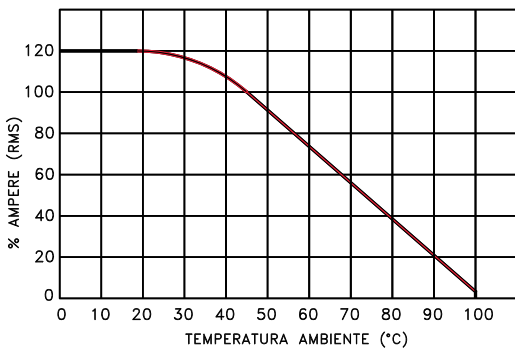
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27A	206	158	140		2/6005MGP3	2,1	2x 45	250	2x29+18 Fuse	1600	500	0.45	50-60	F10
55A	206	158	140		2/6010MGP3	2,1	2x 85	250	2x58+20 Fuse	1600	500	3.9	50-60	F10
85A	283	196	140		2/6017MGP3	3.5	2x 85	250	2x88+66 Fuse	1600	500	6.2	50-60	F11
125	360	135	260	yes	2/6020MGP3	5	2x 165	250	2x132+92 Fuse	1600	500	8.9	50-60	F12
165	360	135	260	yes	2/6025MGP3	5.	2x 180	250	2x174+100 Fuse	1600	500	13.5	50-60	F12
225	360	135	260	yes	2/6030MGP3	5.	2x 250	250	2x234+118 Fuse	1600	500	43	50-60	F12
300	500	210	280	yes	2/6035MGP3	6	2x 350	250	2x300+160 Fuse	1600	500	105	50-60	F13
400	500	240	290	yes	2/6040MGP3	12	4X250	250	2x426+210 Fuse	1600	500	150	50-60	F14

Tabella modelli tri-monofasi / three -Single-phase models table

dimension tri-monofasi / three- single - phase
Drei-Einphasigen / TRI FASE / Tri PHASE / de trois phases

Amp	H	L	P	FORCED AIR	ITEM	WEIGHT KG	FUSE	ISOLATION VAC	POWER LOSS	Ripetitive peak 500V	Latching current mA	i2T KA for fusing 10mSec.	frequency	figura picture
27A	206	237	140		3/6005MGP3	3,1	3x 45	2500	3x29+27 Fuse	1600	500	0.45	50-60	F15
55A	206	237	140		3/6010MGP3	3,1	3x 85	2500	3x58+30 Fuse	1600	500	3.9	50-60	F15
85A old	351	306	185		3/6015MGP3	9	3x 85	2500	3x88+99 Fuse	1600	500	6.2	50-60	F17
85A fan	280	270	145	yes	3/6017MGP3	5	3x 85	2500	3x88+99 Fuse	1600	500	6.2	50-60	F16
125	450	380	225	yes	3/6020MGP3	12	3x 165	2500	3x132+138 Fuse	1600	500	8.9	50-60	F18
165	450	380	225	yes	3/6025MGP3	12	3x 180	2500	3x174+150 Fuse	1600	500	13.5	50-60	F18
225	550	380	225	yes	3/6030MGP3	14	3x 250	2500	3x234+177 Fuse	1600	500	43	50-60	F18
300	550	380	225	yes	3/6035MGP3	14	3x 350	2500	3x300+240 Fuse	1600	500	105	50-60	F18
125	420	267	210	yes	3/9020MGP3	12	3x 165	2500	3x132+138 Fuse	1600	500	8.9	50-60	F18a
165	420	267	210	yes	3/9025MGP3	13	3x 180	2500	3x174+150 Fuse	1600	500	13.5	50-60	
225	420	267	210	yes	3/9030MGP3	14	3x 250	2500	3x234+177 Fuse	1600	500	43	50-60	
300	420	267	210	yes	3/9035MGP3	14	3x 350	2500	3x300+240 Fuse	1600	500	105	50-60	

dati Termici - Thermal Data



temperatura di lavoro 0 - 45°C
Operating temperature 0 - 45°C

fissaggio VERTICALE
mounting VERTICAL

protezione termica - Thermal over load

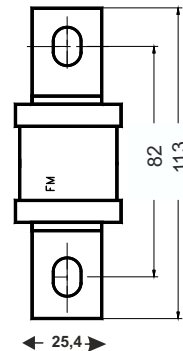
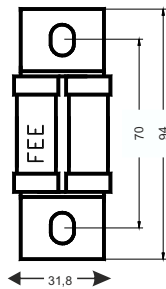
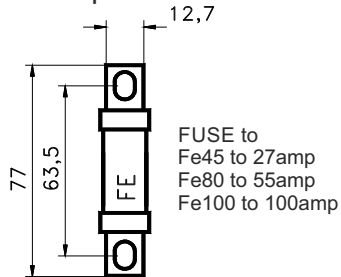
protezione termica e ventilazione nei modelli ventilati vi è un termostato da 80°C NC 2amp che serve in caso il ventilatore si rompe .

thermal protection and ventilation in ventilated models there is a thermostat from 80 ° C NC 2amp which serves in case the fan breaks.



Fusibili interni / interna Fuse

Extrarapid Bs88 Fuse



FUSE to
Fm 180 to 165amp
Fm 250 to 225amp
Fm 350 to 300amp
Fm2x250 to 400amp
Fm3x250 to 600amp
Fm3x315 to 800amp
Fm4x280 to 1000amp

Card inside Gp3

Card inside Gp3 una per ogni fase
Card inside Gp3 one for each phase

