INTERRUTTORI BREMAS

BREMAS SWITCHES

PULSANTIERE GIOVENZANA

GIOVENZANA PENDANT STATIONS

INTERRUTTORI ORIGINALI

ORIGINAL SWITCHES

Tutte le caratteristiche tecniche riportate in questo catalogo sono state fornite dalle case costruttrici e sono suscettibili di variazioni senza alcun preavviso.

All the technical specifications shown in the catalogue have been provided by the manufacturers and are subject to change without notice.

INTERRUTTORI BIPOLARI CON BOBINA DI MINIMA

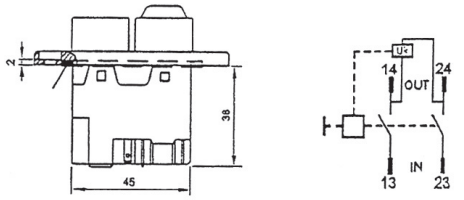
BIPOLAR SWITCHES WITH MINIMUM-VOLTAGE COIL



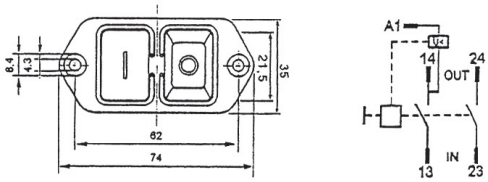
Articolo *Art.*	Descrizione *Description*
IN.3251.20	-
IN.3251.21	Con contatto ausiliario *With auxiliary contact*

230 V 16A - PROTEZIONE ANTERIORE IP 54
230 V 16A - FRONT PROTECTION IP54

IN.3251.20



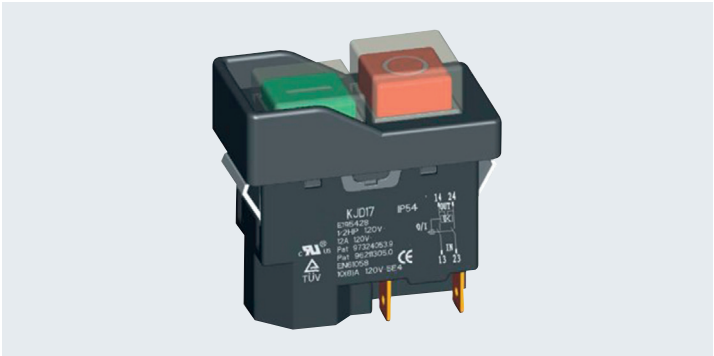
IN.3251.21



COR.20



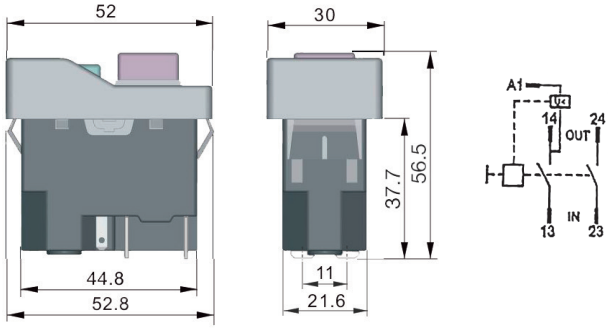
Cornice IP65 a fungo con blocco IN3251.20/21
Cover IP65 mushroom-shaped with lock for IN3251.20/21



Articolo *Art.*	Descrizione *Description*
IN.3251.24	-
IN.3251.25	Con contatto ausiliario *With auxiliary contact*

230 V 16A - PROTEZIONE ANTERIORE IP 54
230 V 16A - FRONT PROTECTION IP54

IN.3251.25



INTERRUTTORE AUTOMATICO CON RELÈ DI MINIMA TENSIONE

AUTOMATIC SWITCH WITH MINIMUM VOLTAGE RELAY

IN.6116

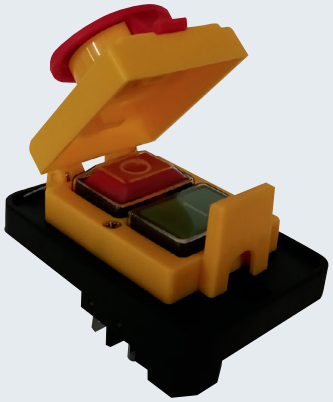


Interruttore bipolare 16A con relè di minima tensione a 230V.
Applicazione: pompe e compressori, macchine per trattamento e lavorazione del legno e del metallo, elettrodomestici e macchine per ufficio, apparecchi da giardino, alimentatori, caricabatterie, gruppi elettronici, betoniere edili, idropulitrici.

Bipolar switch 16A with minimum voltage relay at 230V.
Application: *pumps and compressors, machines for treating and working wood and metal, household appliances and office machinery,garden equipment, supply units, battery chargers, electronic units, cement mixers, high-pressure cleaners.*

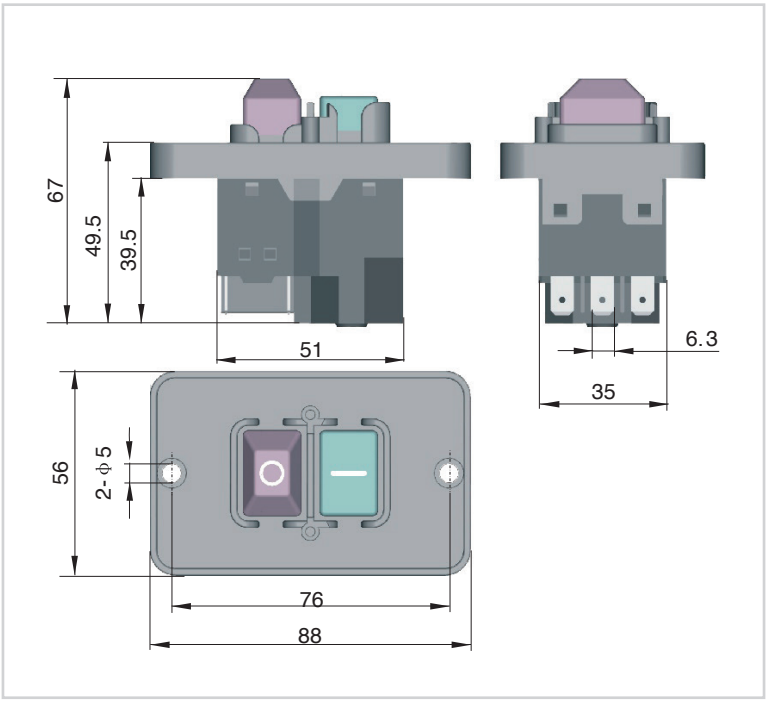
INTERRUTTORI CON BOBINA DI MINIMA

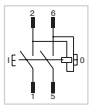
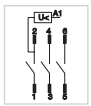
SWITCHES WITH MINIMUM-VOLTAGE COIL



Interruttori con bobina di minima.
Pulsante a fungo per arresto di emergenza IP54.

Switches with minimum voltage coil Mushroom-Shaped button for emergency stop IP54.



Articolo *Art.*	**Descrizione** *Description*	
IN.3251.22	Interruttore bipolare 16A *Bipolar switch 16A*	
IN.3251.23	Interruttore tripolare con fase ausiliaria 7.5A *Three-pole switch with auxiliary phase 7.5A*	

INTERRUTTORI - AVVIATORI

SWITCHES - STARTERS



Interruttori - Avviatori con bobina di minima tensione.
Switches - Starters with minimum tension coil.

Articolo *Art.*	**Tensione V** *Tension V*	**Ampere**	**Protezione termica** *Thermic protection*
AVV.30	220	16	NO



Articolo *Art.*	**Tensione V** *Tension V*	**Ampere**	**Protezione termica** *Thermic protection*
CAP.1	230	16	NO

SALVAMOTORI CON CONDENSATORI PER BETONIERE

MOTOR PROTECTIONS WITH CAPACITORS FOR CONCRETE MIXER

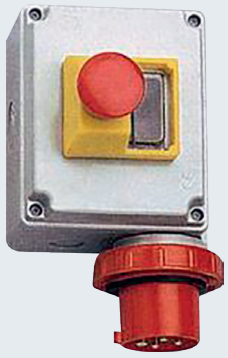


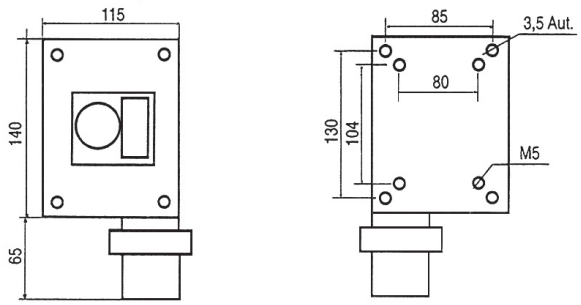
CAP.40
Cassetta salvamotore con spina 2P+T 16A IP67, fusibili di protezione e condensatore da 35 µF. Adatto per betoniere/ impastatrici 180/250 LT con motore da 1 HP, completa di staffa di fissaggio incorporata per montante mm 80.
Motor protection with plug 2P+T 16A IP67, protection fuses and 35 MFD capacitor. For concrete mixers/kneader 180/250 LT with 1HP engine. Additional yoke ***for busbar connections mm 80****.*

CAP.41
Cassetta salvamotore con spina 2P+T 16A IP67, fusibili di protezione e condensatore da 50 µF. Adatto per betoniere/ impastatrici 320/360 LT con motore da 2 HP, completa di staffa di fissaggio incorporata per montante mm 100.
Motor protection with plug 2P+T 16A IP67, protection fuses and 50 MFD capacitor. For concrete mixers/kneader 320/360 LT with 2HP engine. Additional yoke ***for busbar connections mm 100****.*

CASSETTE - INTERRUTTORI MAGNETOTERMICI BOBINA DI MINIMA

BOX - MAGNETOTHERMAL - MINIMUM COIL



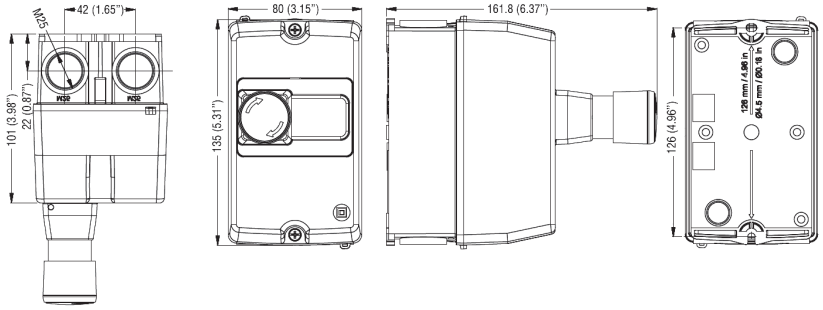


Articolo *Art.*	Descrizione *Description*
CS.2P	Cassetta con spina 2 Poli + T / *Box with plug 2 Poles + T*
CS.3P	Cassetta con spina 3 Poli + T / *Box with plug 3 Poles + T*

NEW »



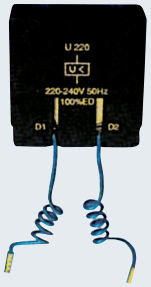
CPF **CP**





MONOFASE Articolo *Single-Phase Art.*	TRIFASE Articolo *Three-Phase Art.*	Ampere
-	**MS.25.4.4**	4.4
MS20.6.3	**MS.25.6.3**	6.3
MS20.10	**MS25.10**	10
MS20.16	**MS.25.16**	16

Completi di bobina di minima.
Complete with minimum coil.



Articolo *Art.*	Volt
BM.400	400

SALVAMOTORI MAGNETOTERMICI

MAGNETOTHERMAL OVERLOAD CUT OUT



DESCRIZIONE
Contenitore in termopolimero ABS, resistente agli urti e agli agenti atmosferici
- Per motori mono e trifase
- Pulsante di emergenza a fungo con blocco
- Relè termico per protezione contro sovraccarico con bobina di tensione di minima

DESCRIPTION
ABS thermopolymer enclosure, resistant to impacts and weather conditions
- *For single- and three-phase motors*
- *Emergency button with lock*
- *Thermal overload protection relay with minimum voltage coil*

MONOFASE Articolo *Single-Phase Art.*	**TRIFASE Articolo** *Three-Phase Art.*	**Ampere**	**Per motori** *For motors*
-	**SM.40**	2, 4-4	1.1-1.8 kw
SM.31	**SM.41**	4-6, 3	1.8-2.9 kw
SM.32	**SM.42**	6, 3-10	2.9-4.4 kw
SM.33	**SM.43**	10-16	4.4-8 kw

SPINE MOBILI DRITTE

STRAIGHT MOVABLE PLUGS

Spina a montaggio e cablaggio rapido bassa tensione 50/60Hz-IP44 - IP67
Fast assembling and cabling plugs low voltage 50/60Hz-IP44 - IP67



Articolo *Art.*	Poli *Poles*	A	Tensione *Tension*	Colore *Colour*	Posiz. oraria *Time position*	IP
P9213	2P+T	16	220÷240 V		6	44
P9214	3P+T	16	380÷415 V		6	
P9413 NEW	2P+T	32	220÷240 V		6	
P9414 NEW	3P+T	32	380÷415 V		6	

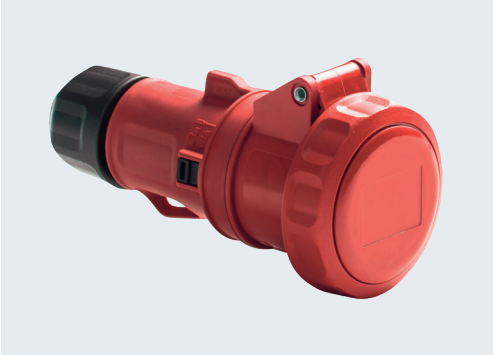


Articolo *Art.*	Poli *Poles*	A	Tensione *Tension*	Colore *Colour*	Posiz. oraria *Time position*	IP
P8213	2P+T	16	220÷240 V		6	67
P8214	3P+T	16	380÷415 V		6	
P8413 NEW	2P+T	32	220÷240 V		6	
P8414 NEW	3P+T	32	380÷415 V		6	

Presa a montaggio e cablaggio rapido bassa tensione 50/60Hz-IP44 - IP67
Fast assembling and cabling connectors low voltage 50/60Hz-IP44 - IP67



Articolo *Art.*	Poli *Poles*	A	Tensione *Tension*	Colore *Colour*	Posiz. oraria *Time position*	IP
P9223	2P+T	16	220÷240 V		6	44
P9224	3P+T	16	380÷415 V		6	
P9523 NEW	2P+T	32	220÷240 V		6	
P9524 NEW	3P+T	32	380÷415 V		6	



Articolo *Art.*	Poli *Poles*	A	Tensione *Tension*	Colore *Colour*	Posiz. oraria *Time position*	IP
P8223	2P+T	16	220÷240 V		6	67
P8224	3P+T	16	380÷415 V		6	
P8523 NEW	2P+T	32	220÷240 V		6	
P8524 NEW	3P+T	32	380÷415 V		6	

MOLTIPLICATORI A 2 USCITE

MULTIPLIERS 2 OUTLETS



Moltiplicatore mobile a 2 uscite e con spina 16A. 50/60Hz-IP44
Movable multiplier 2 outlets with plug 16A. 50/60Hz-IP44

Articolo *Art.*	**Poli** *Poles*	**A**	**Tensione** *Tension*	**Colore** *Colour*
P1622	2P+T	16	220÷240 V	
P1625	3P+T	16	380÷415 V	

MOLTIPLICATORI A 3 USCITE

MULTIPLIERS 3 OUTLETS



Moltiplicatore mobile a 3 uscite con spina IP44
Movable multiplier 3 outlets with plug IP44

Articolo *Art.*	**Poli** *Poles*	**A**	**Tensione** *Tension*	**Colore** *Colour*
P1402	2P+T	16	220÷240 V	
P1405	3P+T	16	380÷415 V	

Moltiplicatore mobile stagno a 3 uscite con spina IP67
Movable multiplier 3 outlets with plug IP67

Articolo *Art.*	**Poli** *Poles*	**A**	**Tensione** *Tension*	**Colore** *Colour*
P1452	2P+T	16	220÷240 V	
P1455	3P+T	16	380÷415 V	



Moltiplicatore mobile stagno IEC 309 a tre uscite con 2mt. cavo flessibile e spina IP67. Cavo flessibile del tipo H07RN F.

Movable multiplier IEC 309 three outlets with 2 m. of flexible cable and plug IP67. H07RN F flexible cable.

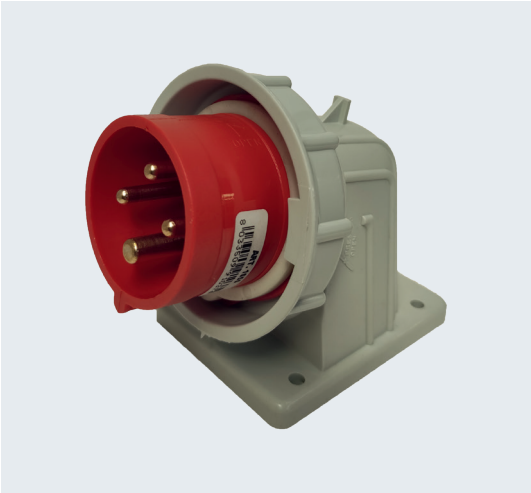
Articolo *Art.*	**Poli** *Poles*	**A**	**Tensione** *Tension*	**Colore** *Colour*
P1552	2P+T	16	220÷240 V	
P1555	3P+T	16	380÷415 V	

SPINE DA PARETE A 90°

WALL 90° ANGLED PLUGS



Articolo *Art.*	Ampere	Tensione 50/60 Hz *Tension 50/60 Hz*	IP
P1012	16	230	44
P1015	16	400	



Articolo *Art.*	Ampere	Tensione 50/60 Hz *Tension 50/60 Hz*	IP
P1052	16	220	67
P1055	16	400	

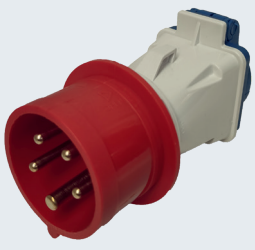
ADATTATORI DI SISTEMA

SYSTEM ADAPTORS

P1874



P1875

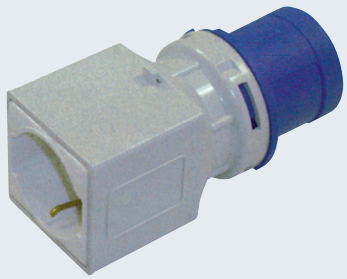


Articolo *Art.*	Descrizione *Description*	Tensione *Tension*	Colore *Colour*
P1874	Spina CEE presa Schuko *CEE Plug-socket Schuko*	220÷240 V	
P1875	Spina CEE presa Schuko *CEE Plug-socket Schuko*	250÷400 V	

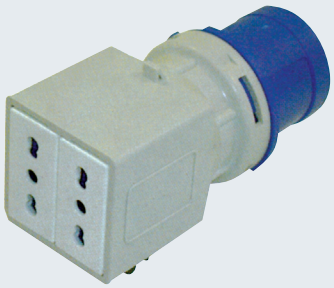
ADATTATORI DI SISTEMA

SYSTEM ADAPTORS

P1862



P1864



P1869

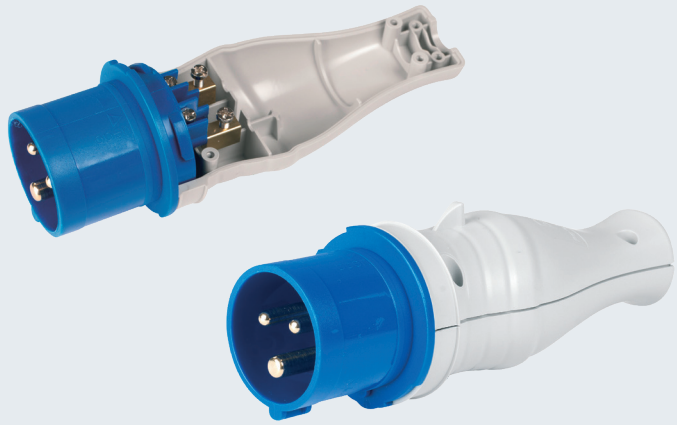


Articolo *Art.*	**Descrizione** *Description*	**Tensione** *Tension*	**Colore** *Colour*
P1862	Spina CEE-presa Schuko bipasso *CEE Plug-socket bivalent Schuko*	220÷240 V	
P1864	Spina CEE 2 prese bipasso *CEE Plug 2 sockets bivalent*	220÷240 V	
P1869	Spina a pettine 16A presa CEE *Plug comb 16A CEE socket*	220÷240 V	

ADATTATORE SCHUKO

SCHUKO ADAPTOR

P1821



Una volta chiusa, la spina Schuko stessa viene nascosta e compare solo la spina industriale.
Garantisce:
- **Il rispetto dei vincoli di garanzia dell'apparecchio**
- **Il rispetto delle normative del cantiere, assicurando maggiore sicurezza ed evitando il rischio di sanzione.**

Once it is closed, the domestic plug is hidden and the industrial one is the only to appear.
Guarantee:
- *The respect of the warranty duties*
- *Greater safety and respect of the building sites norms.*

SPINE E PRESE MOBILI

MOVABLE SOCKET AND PLUG

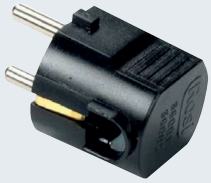
S.04



Spina mobile 16A 2P+T 250V
Standard S30 CEI 23-50

Plug 16A 2P+T 250V
Standard S30 CEI 23-50

S.03



Spina mobile 16A 2P+T 250V
Standard S30 CEI 23-50

Plug 16A 2P+T 250V
Standard S30 CEI 23-50

S.22



Spina mobile 16A 2P+T 250V
Standard Italia S17 CEI 23-50

Plug 16A 2P+T 250V
Italian standard S17 CEI 23-50

P.21



Presa mobile 10/16A 2P+T 250V
Standard Italia P17/11 CEI 23-50

Socket 10/16A 2P+T 250V
Italian standard P17/11 CEI 23-50

MULTIPRESE E PROLUNGHE

MULTIPLE SOCKETS AND EXTENSION CABLES

MP.03



MP.01



MP.60



Articolo *Art.*	**Cavo** *Cable*	**Interruttore** *Switch*	**Spina** *Plug*	**Prese** *Sockets*	**Prese** *Sockets*
MP.03	H05VV-F 3G1 1,5 M	-	16A 2P+T 250 V SPA 17	10/16 A 2P+T - P17/M	1
MP.01		-		-	3
MP.60		-		-	5



Articolo *Art.*	**Metri** *Meters*	**Cavo** *Cable*	**Spina** *Plug*	**Prese** *Sockets*	**Tensione** *Voltage*
PLG.30	3	H05VV-F 3G 1,5	16A 2P+T S. 17	10/16 A 2P+T P17/M	250 V
PLG.32	5				
PLG.34	10				

AVVOLGICAVO

CABLE REEL



Avvolgicavo di robusta costruzione, adatto per l'industria, l'artigianato, l'edilizia e qualsiasi luogo ove necessiti portare prese di corrente sul posto di lavoro. Realizzati secondo la norma CEI/IEC 1316 (1° edizione 1994). Costruiti in tecnopolimero ad alta resistenza meccanica e supporto metallico in acciaio zincato verniciato a forno. Dotato di prese e spine IP44 o IP67, fermacavo antistrappo e disgiuntore termico ripristinabile manualmente per la protezione contro il sovraccarico di corrente. Disponibile con tre prese e disgiuntore e due prese con protezione magnetotermico o differenziale magnetotermico.Versione con tamburo da 330 mm e cavalletto.

A strong cable reel suitable for industry, handcrafts, building and for any other place where it is necessary to bring electric sockets for working. According to regulation CEI/IEC 1316 (1° edit. 1994). Built in engineering polymer with an high mechanic resistance, it has a zinc-steel metallic stand oven-paint. It is supplied with sockets and plugs IP44 or IP67, stopping cable against pull and thermical disjunctor which can normally be bring back into use for the protection against current overloaded. Model with drum of 330 mm and stand.

Articolo *Art.*	**Protezione** *Protection*		**Prese** *Sockets*	**Cavo mt. 30** *Cable m. 30*	**Potenza (W)** *Power (W)*		**Tensione** *Voltage*
A41	IP44	**Disgiuntore termico** *Thermal disjunctor*		3x2.5	1800	3600	230 V
A42	IP67			3x2.5	1800	3600	230 V



Avvolgicavo PVC Ø 230 - 300 (Uso domestico in ambienti asciutti)
Cable reel PVC Ø 230 - 300 (Domestic use in dry ambients)

Articolo *Art.*	**Cavo H05VV-F "HAR"** *Cable H05VV-F "HAR"*	**Lungh. mt.** *Length m.*	**Potenza (W)** *Power (W)*		**Prese e spine** *Sockets and plugs*	**Protezione** *Protection*
CR14254	3G 150	25	1200	3400	**4 prese e 1 spina 2P+T 16A 250V** *4 sockets and 1 plug 2P+T 16A 250V*	**termico** *thermic*
CR14504	3G 150	50	1200	3400	**4 prese e 1 spina 2P+T 16A 250V** *4 sockets and 1 plug 2P+T 16A 250V*	**termico** *thermic*



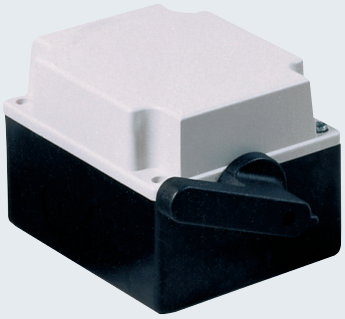
Avvolgicavo giardinaggio - PVC Ø 230 - 300
Gardening cable reel - PVC Ø 230 - 300

Articolo *Art.*	**Cavo H05VV-F "HAR"** *Cable H05VV-F "HAR"*	**Lungh. mt.** *Length m.*	**Potenza (W)** *Power (W)*		**Prese e spine** *Sockets and plugs*
GD12254	3G 150	25	1200	3400	**1 presa Schuko e 1 spina Italia 250V** *1 socket Schuko and 1 plug Italy 250V*

CASSETTE CON COMANDO LATERALE-FRONTALE

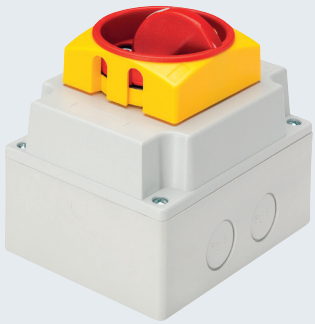
BOXES WITH SIDE-FRONT CONTROL

CAP. 571



Comando laterale a leva
Side control with lever
IN ABS IP65 - 120x95x78 mm

CAP. 572



Comando frontale
Front control
IN ABS IP65 - 120x95x78 mm

INTERRUTTORI SEMIROTATIVI

SEMI-ROTARY SWITCHES







Interruttore Bipolare
Bipolar switch

Articolo *Art.*	Ampere
GIN.1202	12
GIN.1702	17
GIN.2502	25



Interruttore Tripolare
Three-pole switch

Articolo *Art.*	Ampere
GIN.1203	12
GIN.1703	17
GIN.2503	25
GIN.3203	32



Invertitore di marcia Tripolare
Reversal switch three-pole

Articolo *Art.*	Ampere
GIN.1208	12
GIN.1708	17
GIN.2508	25



Commutatore di poli Dahlander
Dahlander Pole change switch

Articolo *Art.*	Ampere
GIN.1209	12
GIN.1709	17
GIN.2509	25

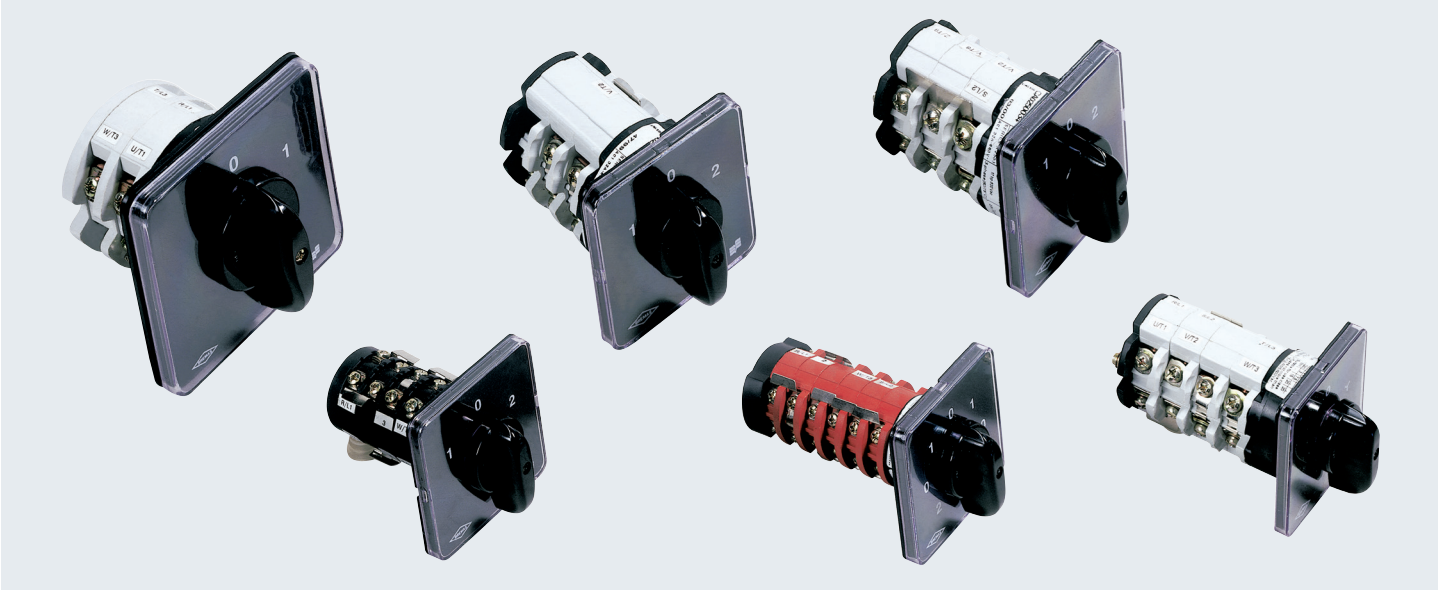


Interruttore per motore monofase con fase ausil.
Switch for single-phase motor with aux. phase

Articolo *Art.*	Ampere
GIN.1231	12
GIN.1731	17

COMMUTATORI A CAMME

CAM SWITCHES



INTERRUTTORI

SWITCHES



Bipolare / *Bipolar*

Articolo *Art.*	**Ampere**
IN.1202	12
IN.1702	17
IN.2502	25



Tripolare / *Three-pole*

Articolo *Art.*	**Ampere**
IN.1203	12
IN.1703	17
IN.2503	25
IN.3203	32
IN.4003	40
IN.6303	63



Tetrapolare / *Tetrapolar*

Articolo *Art.*	**Ampere**
IN.1204	12
IN.1704	17
IN.2504	25
IN.3204	32
IN.4004	40
IN.6304	63

INTERRUTTORE PER MOTORI LAFERT

SWITCH FOR LAFERT MOTOR

IN.1588



Interruttore monofase con avviamento 16A.
Single-phase switch with 16A starter.

COMMUTATORI DI LINEA

BREMAS
BETTER SWITCHES

LINE SWITCHES



Unipolare
Unipolar

Articolo *Art.*	Ampere
IN.1205	12
IN.1705 *	17
IN.2505 *	25



Bipolare
Bipolar

Articolo *Art.*	Ampere
IN.1206	12
IN.1706	17
IN.2506	25



Tripolare
Three-pole

Articolo *Art.*	Ampere
IN.1207	12
IN.1707	17
IN.2507	25



Tetrapolare
Tetrapolar

Articolo *Art.*	Ampere
IN.1239	12
IN.1739	17
IN.2539	25

*** IN ESAURIMENTO**
RUNNING OUT

AVVIATORI - COMMUTATORI - INVERTITORI

STARTERS - SWITCHES - REVERSAL SWITCHES



Invertitore di marcia Tripolare
Reversal switch three-pole

Articolo *Art.*	Ampere
IN.1208	12
IN.1708	17
IN.2508	25



Commutatore di poli Dahlander
Dahlander Pole change switch

Articolo *Art.*	Ampere
IN.1209	12
IN.1709	17
IN.2509	25



Avviatore Y-Δ
Y-Δ Delta starter

Articolo *Art.*	Ampere
IN.1710	17
IN.2510	25
IN.3210	32



Commutatore di poli con inversione
Pole change switch with reversal

Articolo *Art.*	Ampere
IN.1211	12
IN.1711	17
IN.2511	25



Interruttore per motore monofase con fase ausil.
Switch for single-phase motor with aux. phase

Articolo *Art.*	Ampere
IN.1231	12
IN.1731	17
IN.2531	25



Invertitore per motore monofase con fase ausil.
Reversal switch for single-phase motor with aux. phase

Articolo *Art.*	Ampere
IN.1232	12
IN.1732	17
IN.2532	25



Invert. per motore mono. con esclusore centrifugo
Reversal switch for single-phase motor with centrifugal cut-out with reversal

Articolo *Art.*	Ampere
IN.1234	12
IN.1734	17
IN.2534	25



Invertitore di marcia tripolare con autoritorno in 0
Three-pole reversal switch with self-return to 0

Articolo *Art.*	Ampere
IN.1236	12
IN.1736	17

N.B. Su richiesta è possibile fornire commutatori a schema speciale per saldatrici e carica batterie industriali. Comunicarci lo schema esatto o farci pervenire il campione.

N.B.: *On request special circuit switches are available for industrial welders and battery chargers. Let us know the exact circuit diagram or send us a sample.*

PULSANTIERE PENSILI

PENDANT STATIONS



PULSANTIERE AUSILIARIE PER PICCOLO SOLLEVAMENTO IP65

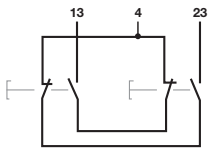
AUXILIARY PENDANT STATION FOR HOST APPLICATIONS IP 65

Articolo *Art.*	**Modello** *Model*	**Descrizione** *Description*
RR.1233	PF39020001	**2 pulsanti - 2 NA + comune 3A/250 Volt - 1 velocità** *2 push bottons - 2 NO + commo 3A/250 Volts - 1 speed*
RR.1234	PF39020002	**2 pulsanti - 3 NA + comune 3A/250 Volt - 2 velocità** *2 push buttons - 2 NO + common 3A/250 Volts - 2 speeds*

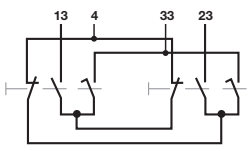


Articolo *Art.*	**Modello** *Model*	**Descrizione** *Description*
RR.1253	PF39030001	**2 pulsanti + fungo (1 NC) 2 NA + comune - 3 A/250 Volt 1 velocità** *2 push bottons + emergency stop (1 NC) 2 NO + common - 3/A 250 Volts 1 speed*
RR.1254	PF39030002	**2 pulsanti + fungo (1 NC) 3 NA + comune - 3A /250 Volt 2 velocità** *2 push buttons + emergency stop (1 NC) 2 NO + common - 3A/250 Volts 2 speeds*

1 VELOCITÀ
1 SPEED



2 VELOCITÀ
2 SPEED

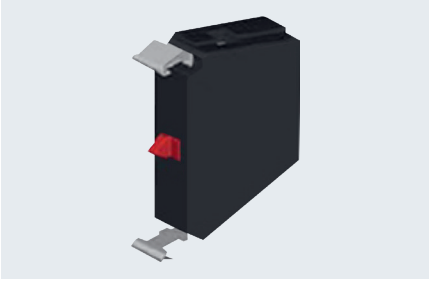


RICAMBI

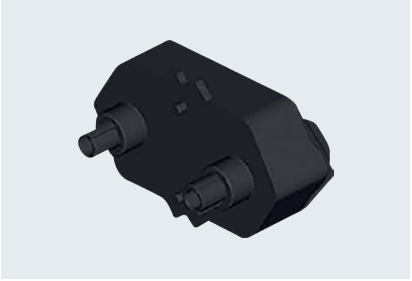
SPARE



PF.12
Pulsante d'emergenza
Emergency button



CP.12
Contatto NC per ulsante d'emergenza
Contac NC for emergency button



CP1.12
Contatto per pulsantiera 1 velocità
Conctact for pendant station 1 speed

CP2.12
Contatto per pulsantiera 2 velocità
Contact for pendant station 2 speeds



MS.12
Manicotto spiralato
Spiral sleeve

PULSANTIERE PENSILI

PENDANT STATIONS



PULSANTIERE PER COMANDO DIRETTO DI MACCHINE INDUSTRIALI

PENDANT STATION FOR DIRECT CONTROL OF INDUSTRIAL MACHINE

Articolo *Art.*	**Modello** *Model*	**Descrizione** *Description*	**Figura** *Figure*
RR.2222	PF30030004	**Per comando motori a 1 velocità trifase 1 pulsante emergenza EN ISO 13850 sblocco rotazione - 20A/400 Volt** *For single-speed motor control No. 1 emergency stop turn to release EN ISO 13850 20A/400 Volt*	**A**
RR.2226	PF30030003	**Per comando diretto bipolare a 2 velocità 1 pulsante emergenza EN ISO 13850 a fungo sblocco rotazione - 20A/400 Volt** *2 speeds bipolar control No. 1 emergency stop turn to release EN ISO 13850 20A/400 Volt*	**B**

fig. A

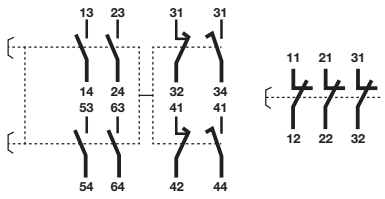
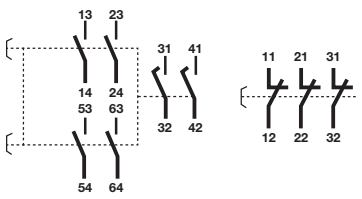


fig. B



RICAMBI

SPARE



PF.22
Pulsante d'emergenza
Emergency button



CF.22
Contatto 3NC per pulsante d'emergenza
Contact 3 NC for emergency button



CP22.1
Contatto per pulsantiera 1 velocità
Contact for pendant station 1 speed

CP22.2
Contatto per pulsantiera 2 velocità
Contact for pendant station 2 speeds

PULSANTIERE PENSILI

PENDANT STATIONS

PULSANTIERE PER PICCOLO SOLLEVAMENTO, PER CIRCUITI AUSILIARI UNIFILARI E BIFILARI, PER CIRCUITI AUSILIARI E DI POTENZA, PER COMANDO SPONDE.

PENDANT STATIONS FOR SMALL HOIST APPLICATIONS, FOR CONTROL CIRCUITS IN BOTH SINGLE OR DOUBLE ROW VERSIONS, FOR CONTROL AND DIRECT SWITCHING POWER CIRCUITS, FOR SIDEBOARD CONTROL.

CARATTERISTICHE GENERALI
- Custodia in materiale termoplastico autoestinguente a doppio isolamento
- Grado di protezione IP65
- Temperatura di esercizio -25° +70°C
- Ingresso cavi con passacavi a sezione variabile
- Tasto di Emergenza secondo EN 60204-1 e EN418
- Durata meccanica: pulsanti e selettori 1 milione di manovre
- Emergenza ad aggancio 0,3 milioni di manovre
- 2 sensi di marcia interbloccati meccanicamente

GENERAL CHARACTERISTICS
- *Double insulated enclosures in thermoplastic self-extinguishing material*
- *IP65 rating*
- *Operating temperature -25° +70°C*
- *Cable entry with variable section cable sleeve*
- *Emergency button EN 60204-1 and EN418*
- *Mechanical life: push buttons and rotary switches 1 mil. operations latched emergency stops*
- *0,3 mil. operations*
- *2 directions mechanically interlocked*



Articolo *Art.*	**Modello** *Model*	**Descrizione** *Description*
RR.1230	P02.1	**Per comando motori a 1 velocità** **n°2 pulsanti con 1 contatto NA** *For single-speed motors control* *No. 2 push buttons with 1 NO contact*
RR.1231	P02.CD	**Per comando diretto per motori monofase 1 kW** **n° 2 pulsanti con contatti 1NC+2NA** *For 1kW single-phase motor control* *No. 2 push buttons with 1NC+2NO contacts*



Articolo *Art.*	**Modello** *Model*	**Descrizione** *Description*
RR.1241	PTRM	**Per comando motore a 1 velocità** **esecuzione predisposta per alloggiamento condensatore max ø 45x90** **n° 1 pulsante Emergenza EN ISO 13850** **a fungo Ø 30 sblocco rotazione** **nº 1 deviatore basculante instabile** **comando ausiliario 16A-250V AC 1/2 HP** *For single speed motor control suitable execution for capacitor 45x90 ø max* *Nº 1 Emergency stop EN ISO 13850 mushroom -shaped ø 30 turn to release* *Nº 1 instable auxiliary control swinging diverter 16A-250V AC 1/2 HP*

PULSANTIERE PENSILI

PENDANT STATIONS

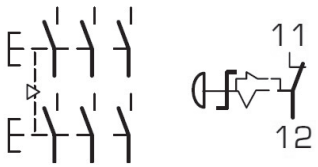
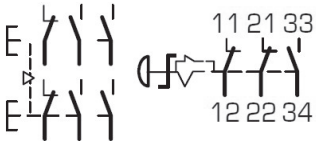
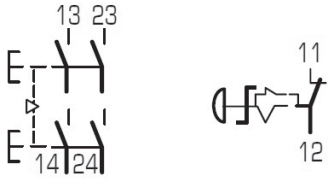
PULSANTIERE PER PICCOLO SOLLEVAMENTO, PER CIRCUITI AUSILIARI UNIFILARI E BIFILARI, PER CIRCUITI AUSILIARI E DI POTENZA, PER COMANDO SPONDE.

PENDANT STATIONS FOR SMALL HOIST APPLICATIONS, FOR CONTROL CIRCUITS IN BOTH SINGLE OR DOUBLE ROW VERSIONS, FOR CONTROL AND DIRECT SWITCHING POWER CIRCUITS, FOR SIDEBOARD CONTROL.



CARATTERISTICHE GENERALI
- Custodia in materiale termoplastico autoestinguente a doppio isolamento
- Grado di protezione IP65
- Temperatura di esercizio -25° +70°C
- Ingresso cavi con passacavi a sezione variabile
- Tasto di Emergenza secondo EN 60204-1 e EN ISO 13850
- Durata meccanica: pulsanti e selettori 1 milione di manovre
- Emergenza ad aggancio 0,3 milioni di manovre
- 2 sensi di marcia interbloccati meccanicamente

GENERAL CHARACTERISTICS
- *Double insulated enclosures in thermoplastic self-extinguishing material*
- *IP65 rating*
- *Operating temperature -25° +70°C*
- *Cable entry with variable section cable sleeve*
- *Emergency button EN 60204-1 and EN ISO 13850*
- *Mechanical life: push buttons and rotary switches 1 mil. operations latched emergency stops*
- *0,3 mil. operations*
- *2 directions mechanically interlocked*

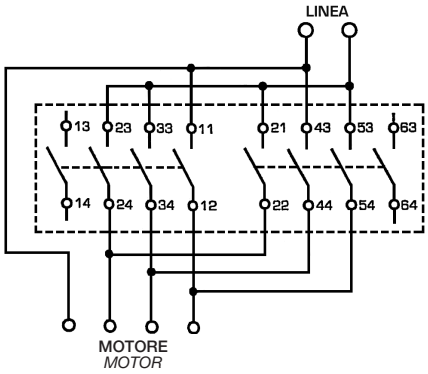
Articolo *Art.*	**Modello** *Model*		**Descrizione** *Description*
RR.1250	P03.1		**Per comando motori a 1 velocità** **n° 1 pulsante Emergenza EN ISO 13850 a fungo Ø 30** **sblocco rotazione con n° 2 pulsanti** **con 1 contatto NA** *For single-speed motor control* *No. 1 Emergency stop Ø 30 turn to release* *EN ISO 13850 with No. 2 push buttons with 1 NO contact*
RR.1251	P03CD		**Per comando diretto per motori monofase 1 kW** **n° 1 pulsante Emergenza EN ISO 13850 a fungo Ø 30** **sblocco rotazione con n° 2 pulsanti con contatti 2NA+1NC** *For 1kW single-phase motor control* *No. 1 Emergency stop Ø 30 turn to release* *EN ISO 13850 with No. 2 push buttons with 2NO+1NC*
RR.1252	P03D2		**Per comando motori a 2 velocità** **n° 1 pulsante Emergenza EN ISO 13850 a fungo Ø 30** **sblocco rotazione con n° 2 pulsanti con 2 contatto NA** *For single-speed motor control* *No. 1 Emergency stop Ø 30 turn to release EN ISO 13850 with No. 2 push buttons with 2 NO contacts*

PULSANTIERA PENSILE MONTATA SU PARANCHI "BETA"

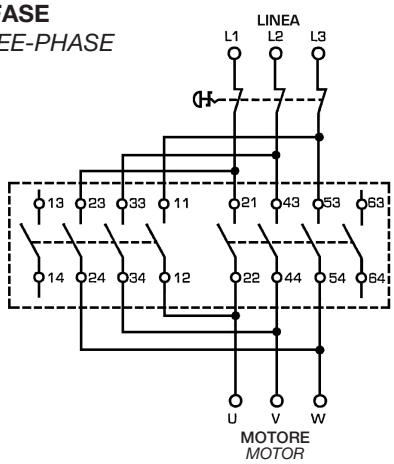
PENDANT STATION MOUNTED ON "BETA" HOISTS



MONOFASE
SINGLE-PHASE



TRIFASE
THREE-PHASE



Articolo *Art.*	**Modello** *Model*
RR.2280	DC 30RG

CARATTERISTICHE GENERALI
- Custodia in ABS a doppio isolamento
- Grado di protezione IP65
- Temperatura ambiente di impiego -25° +70°C
- Contatti ad apertura lenta a doppia interruzione ad azionamento rapido
- Ingresso cavo con pressacavo antistrappo M25
- Tensione nominale di isolamento Ui 500V
- Corrente nominale termica Ith 25A
- 2 sensi di marcia interbloccati meccanicamente

Descrizione:
- Per comando diretto per motori monofase e trifase 1 velocità
- n. 1 Emergenza EN418 a fungo Ø 30 sblocco
- Rotazione 1NC+1NA monoblocco contatti 4NA

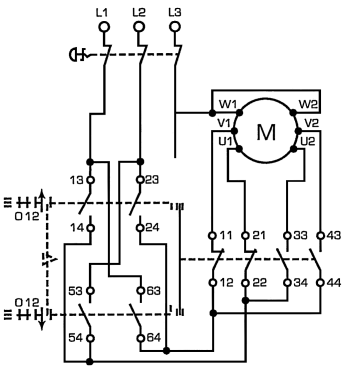
GENERAL CHARACTERISTICS
- *Double insulated ABS enclosures*
- *IP65 protection*
- *Ambient temperature operating -25° +70°C*
- *Slow break or snap action double gap contacts*
- *Cable entry with M25 cable clamp*
- *Rated insulation voltage Ui 500V*
- *Rated thermal current 25A*
- *2 directions mechanically interlocked*

Description:
- *For single/three-phase 1 speed motors direct control*
- *No.1 Emergency stop Ø 30 turn to release EN418*
- *With 1NC+1NO contacts and 4NO contact block*

PULSANTIERA PENSILE PER CIRCUITI DI POTENZA

PENDANT STATION FOR POWER CIRCUITS





Descrizione:
- Per comando diretto per motori monofase a 2 velocità
- Emergenza EN418 a fungo Ø 30 sblocco a rotazione
- 3 contatti NC con: monoblocco contatti 2NA + 2NC scalati

Description:
- *For 2-speed motor single-phase direct control*
- *No. 1 Emergency stop Ø 30 turn to release EN418*
- *With 3NC contacts and: 2NO + 2NC contact block*

Articolo *Art.*	**Modello** *Model*
RR.2285	DC 30D2

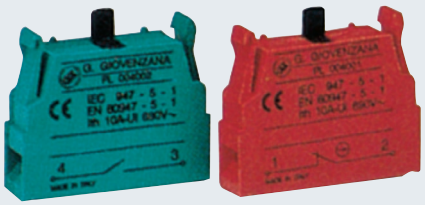
RICAMBI PER PULSANTIERE PENSILI

SPARE PARTS FOR PENDANT STATIONS



FRUTTI / *CONTACT BLOCKS*

Articolo *Art.*	**Codice** *Code*	**Per modello** *For model*	**Descrizione** *Description*
RR.1225.8	30205087	DC30RG (RR.2280)	**1 velocità** *1 speed*
RR.1223.8	30205086	DC30D2 (RR.2285)	**2 velocità** *2 speed*



ELEMENTI DI CONTATTO PER EMERGENZA PER SERIE P02 - P03 - DC
EMERGENCY CONTACT ELEMENTS FOR SERIES P02 - P03 - DC

Articolo *Art.*	**Modello** *Model*	**Descrizione** *Description*
PL.4001	PL004001	1NC / NC
PL.4002	PL004002	1NA / NO



2 VELOCITÀ / *2 SPEED*

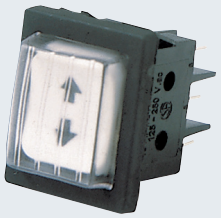
Articolo *Art.*	**Modello** *Model*	**Descrizione** *Description*
PL.4010	PL004010	1NO+1NO



PULSANTE EMERGENZA - SBLOCCO ROTAZIONE PER SERIE P02 - P03
EMERGENCY BUTTON - ROTATING RELEASE FOR SERIES P02 - P03

Articolo *Art.*	**Modello** *Model*
PE.15	PPFN1R3N

FB.02



PULSANTE BASCULANTE / *SWINGING BUTTON*

Montato su pulsantiere pensili per piccolo sollevamento.
Utilizzato su pulsantiera articolo RR.1241
MONOFASE A 1 VELOCITÀ / 16A 250V - COMANDO AUSILIARIO

Mounted on pendant stations strip for small lifting operations.
Used on push-button strip article RR.1241
SINGLE-PHASE 1 SPEED / 16 A 250 V - AUXILIARY CONTROL

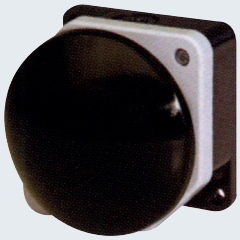
PULSANTIERE A FUNGO

PUSH-BUTTON MUSHROOM-SHAPED

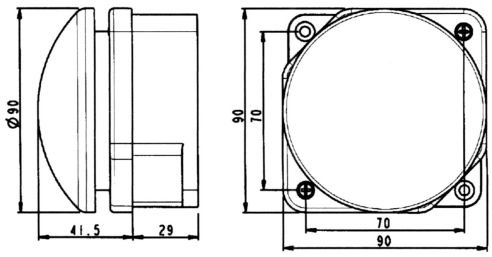
PF. 10



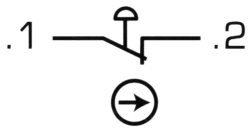
PF. 20



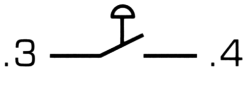
Pulsantiere a fungo assiale instabile Ø 90.
Instable push-button with mushroom head momentary Ø 90.



Contatto / *Contact* (PF. 10)



Contatto / *Contact* (PF. 20)



Articolo *Art.*	**Modello** *Model*
PF. 10	PG1M9W01
PF. 20	PG8M9W10

Tensione nominale di impiego Ue *Rated operating voltage Ue*	**V**	690
Corrente nominale termica Ithe *Rated thermal current Ithe*	**A**	10
Correnti nominali di impiego Ie: *Rated operating current Ie:*		
AC - 15	**V/A**	24/16 - 60/12 110/5 - 240/5 400/4 - 500/4 690/2
DC - 13	**V/A**	24/2 - 48/2 60/1 - 110/0,4 250/0,4
UL 508		A600 - Q600
Omologazioni *Approvals*		UL, IMQ, CCC, GOST-R, R.I.NA

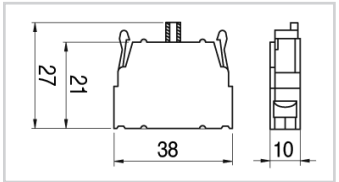
CARATTERISTICHE ELETTRICHE
- Grado di protezione EN60529 IP 66
- A doppio isolamento
- Capacità n°. contatti max. 3 elementi
- Entrata cavi n° 3 fori sfondabili Pg 13,5/M20
- Temperatura ambiente: di impiego -25° +70°C - di stoccaggio -30° +70°C
- Resistenza al clima: IEC 68 2-3, 2-30
- Identificazione morsetti: EN 50013

ELECTRICAL CHARACTERISTICS
- *Protection degree EN60529 IP 66.*
- *Double insulated*
- *Number contact capacity max. 3 contact block.*
- *Cable entry with 3 breakable holes Pg 13,5/M20.*
- *Ambient temperature: operating -25° +70°C - storage -30° +70°C*
- *Climate protection: IEC 68 2-3, 2-30*
- *Terminals identification: EN 50013*

ELEMENTI DI CONTATTO CONNESSIONI A MOLLA

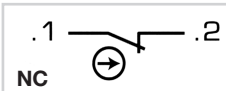
CONTACT BLOCKS SPRING LOADED TERMINALS



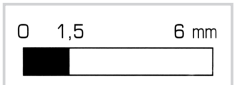


Articolo *Art.*	**Modello** *Model*
PL. 15	PCW01
PL. 16	PCW10

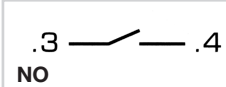
PL. 15
Schema / Designation



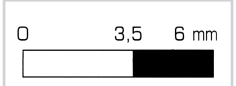
Funzioni / Function



PL. 16
Schema / Designation



Funzioni / Function



FINECORSA UNIVERSALI - NUOVI MODELLI

UNIVERSAL LIMIT SWITCHES - NEW MODELS

RR.1686



RR.1680



RR.1703



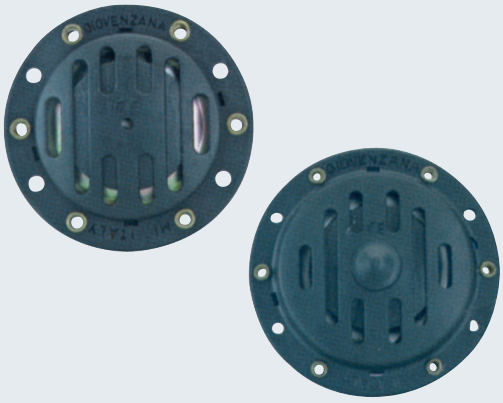
CARATTERISTICHE GENERALI
- In materiale termoplastico
- Temperature ammesse da -20° a +70°C
- Funzionamento contatti ad apertura lenta 1NA+1NC
- Corrente nominale termica 10A 380V
- Grado di isolamento IP65 in accordo IEC947-5-1

GENERAL SPECIFICATIONS
- *Thermoplastic material*
- *Acceptable temperature between -20° +70°C*
- *Contact type slow break 1NA+1NC*
- *Rated thermal current 10A 380V*
- *Insulation standard IP65 according to IEC947-5-1*

Scatto rapido 1NC+1NA
Quick release 1NC+1NA

SEGNALATORI ACUSTICI UNITONALI

SINGLE TONE WARNING HORNS



Claxon unitonali a servizio continuo utilizzabili anche su autocarri, trattori, carrelli elevatori e per qualsiasi utilizzo industriale.

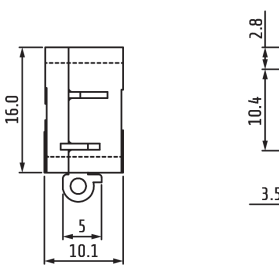
Continuous service single-tone horns also suitable for trucks, tractors, forklift trucks and all other industrial uses.

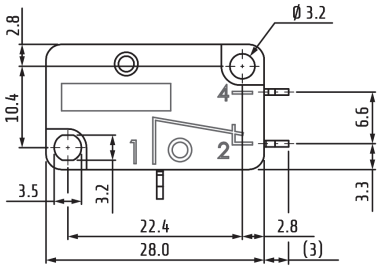
Ø ESTERNO mm 75 **Ø UTILE mm 55** *out Ø mm 75* *working Ø mm 55*	**Ø ESTERNO mm 100** **Ø UTILE mm 85** *out Ø mm 100* *working Ø mm 85*	**Volt**
Articolo *Art.*	**Modello** *Model*	
G370.48N	**G371.48N**	48
G370.110N	**G371.110N**	110

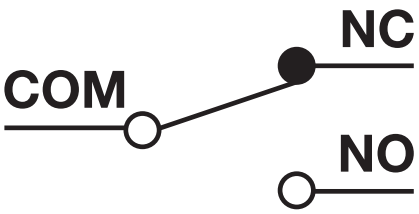
NEW »

MICROINTERRUTTORI

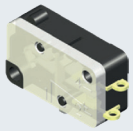
MICROSWITCHES

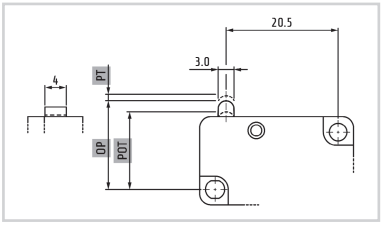




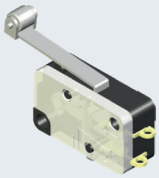


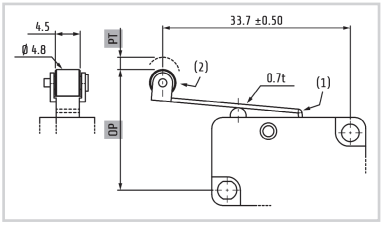
MFI



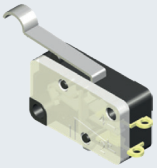


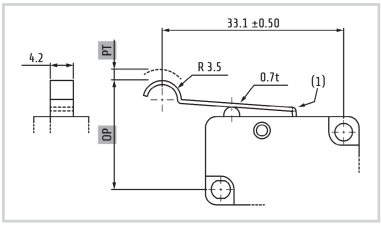
MFI.1



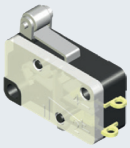


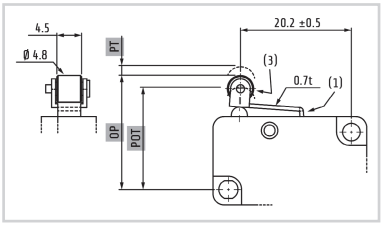
MFI.2



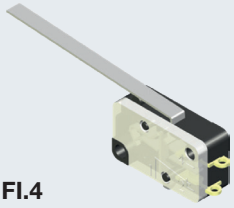


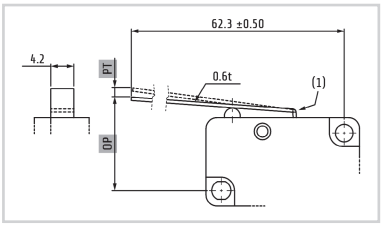
MFI.3



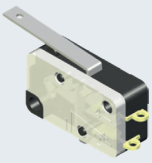


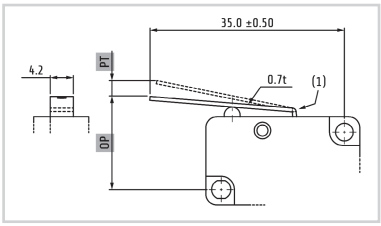
MFI.4



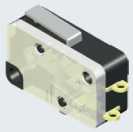


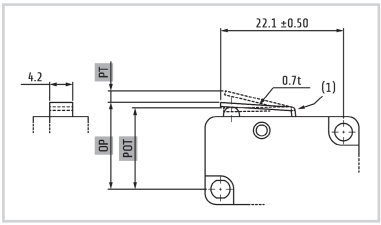
MFI.5



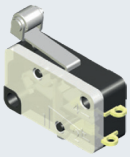


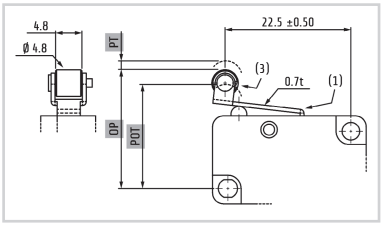
MFI.6





MFI.7





	Articolo / *Art.*								
	MFI	MFI.1	MFI.2	MFI.3	MFI.4	MFI.5	MFI.6	MFI.7	
	Caratteristiche / *Characteristic*								
OF (Forza operativa) max.	5.1	3.2	3.2	5.1	1.3	3.2	5.1	4.5	N
RF (Forza di rilascio) min.	1.9	1.0	1.0	1.9	0.15	1.2	1.9	1,9	N
PT (Percorsa) max.	1.4	3.3	3.3	1.4	7.6	3.3	1.6	1.8	mm
OT (Oltrecorsa) min.	0.8	0.8	0.8	0.6	2.2	0.8	0.6	0.8	mm
MD (Movimento differenziale) max.	0.3	0.8	0.8	0.6	2.2	0.8	0.6	0.6	mm
OP (Posizione di funzionamento)	14.4±0.5	20.3±1.2	18.4±1.2	20.3±0.8	15.1±2.6	15.1±1.2	15,1±0.6	21.1±0.6	mm
POT (Apertura positiva) ⊖	13.4	-	-	19.2	-	-	14.2	19.5	mm

FINECORSA A VITE SENZA FINE

WORM-SCREW LIMIT SWITCH



**Questa gamma di finecorsa trova applicazione in tutte quelle occasioni dove si devono controllare i giri di organi rotanti.
Esempi comuni sono i tamburi avvolgifune di gru e macchine operatrici in genere. Caratteristica fondamentale di detti finecorsa, è la regolazione micrometrica"continua" che consente tarature estremamente semplici e precise.**

This range of limit switches is suitable for all applications where the revolutions of rotating parts have to be monitored. Common examples are the cable-winding drums of cranes and operating machines in general. A major feature of these limit switches is "continuous" micrometric adjustment which ensures extremely simple and precise settings.

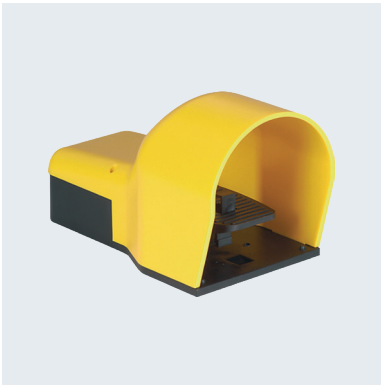
Articolo *Art.*	**Modello** *Model*	**Rapporto** *Ratio*
RR.1142	FGR.2006	1÷12
RR.1143	FGR.2007	1÷33
RR.1144	FGR.2009	1÷100
RR.1145	FGR.2010	1÷200

DATI TECNICI
- Corpo in alluminio pressofuso e coperchio in materiale termoplastico autoestinguente.
- Mozzo portacamme in PA con albero in acciaio montato su cuscinetti a sfera.
- Vite senza fine in acciaio montata su cuscinetti a sfera.
- Apertura contatti a scatto rapido con contatto NC ad apertura positiva ⊖
- Grado di protezione IP65 - Temperature ammesse da -20° +70°C.

TECHNICAL SPECIFICATIONS
- *Die cast main body with self extinguishing thermoplastic cover*
- *PA holder hub with steel shaft mounted on ball bearings.*
- *Steel worms-crew mounted on ball bearings.*
- *Snap action contacts with positive opening NC contact* ⊖
- *Insulation standard IP65 - Acceptable temperature between -20° +70°C.*

INTERRUTTORE DI SICUREZZA A PEDALE

FOOT SAFETY SWITCH



ELETTRICO
- In materiale termoplastico IP54 ⧈
- Con dispositivo di blocco in posizione di riposo

ELECTRIC
- *IP54 ⧈ thermoplastic type*
- *With trigger mechanism requiring positive action to allow pedal operation*

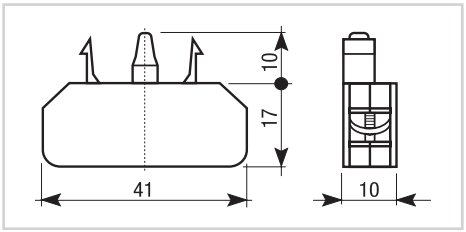
Articolo *Art.*	**Modello** *Model*	**Contatti** *Contact*
PC.1	IP7007	**Ad azione lenta 1 NA /** *Slow switch 1 NO*
PC.2	IP7008	**Ad azione lenta 2 NA /** *Slow switch 2 NO*

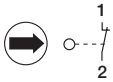
ELEMENTI DI CONTATTO A CONTATTO SINGOLO PER AUSILIARI DI COMANDO E SCATOLE

SINGLE-CONTACT CONTACT ELEMENT FOR CONTROL AUXILIARIES AND BOXES



AZIONE LENTA - Fissaggio retroquadro
SLOW ACTION - Fitted behind panel



Articolo *Art.*	**Modello** *Model*	**Descrizione** *Description*	**Schema** *Diagram*
PLR.01	C01B	**Azione lenta NC** *Action NC*	
PLR.10	C10B	**Azione lenta NA** *Action NA*	

AUSILIARI DI COMANDO E SEGNALAZIONE

AUXILIARY CONTROL AND INDICATOR DEVICES

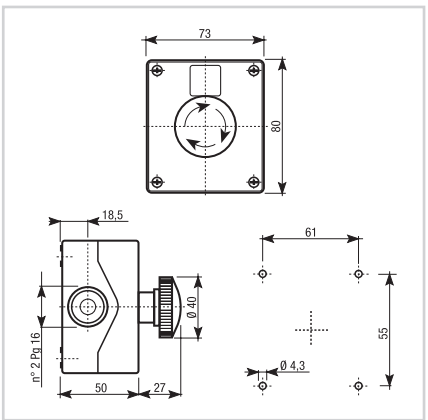


Articolo *Art.*	**Modello** *Model*
SC.50	SC1-50

SCATOLE COMPLETE A DOPPIO ISOLAMENTO
COMPLETE DOUBLE-INSULATION BOXES

Descrizione
- Scatola IP65 con coperchio giallo
- Pulsante a fungo con sblocco a rotazione Ø 40 mm rosso
- 1 contatto NC
- Targhetta con scritta STOP

Description
- *Box IP65 with yellow lid*
- *Mushroom-shaped button with rotation release Ø 40 mm red*
- *1 NC contact*
- *Plate bearing the word STOP*



CONDUTTORI - CAVI ELETTRICI AUTOPORTANTI

CONDUCTORS - SELF SUPPORTING POWER CABLES

FORNIBILI SU RICHIESTA
AVAILABLE ON REQUEST



CARATTERISTICHE TECNICHE
Cavi tondi autoportanti flessibili con funi di acciaio laterali S05VVD7-F.

Descrizione
- Rispondenti alle norme CEI 20-22 II (antifiamma)
- Grado di isolamento: 2/3
- Tensione di esercizio: 300/500 V
- Guaina esterna colore blu
- Conduttori interni flessibili con guaina in pvc numerata progressivamente, più conduttore di terra (giallo/verde)
- Temperatura di esercizio:-5°C / +70°C
- Funi di acciaio: Ø 2 mm
- Carico di rottura: 60 kg/mmq

Impiego
Costruiti per impieghi gravosi in particolare per comandi sospesi e organi elettromeccanici in movimento. Le due funi sono incorporate diametralmente opposte alla guaina in pvc. Le funi tagliate nella giusta lunghezza e agganciate all'organo di comando evitano sollecitazioni sul cavo.

TECHNICAL FEATURES
Supporting flexible round cables with lateral steel ropes SO5VVD7-F

Description
- *According to CEI regulations 20-22 II (non flammable)*
- *Insulation rate: 2/3*
- *Operating voltage: 300/500 V*
- *Outer sheath color blue*
- *Flexible internal conductors with pvc sheath progressively numbered moreover earth conducer (yellow/green)*
- *Operating temperature: -5°C / +70°C*
- *Steel ropes: Ø 2 mm*
- *Breaking strength: 60 kg/mmq*

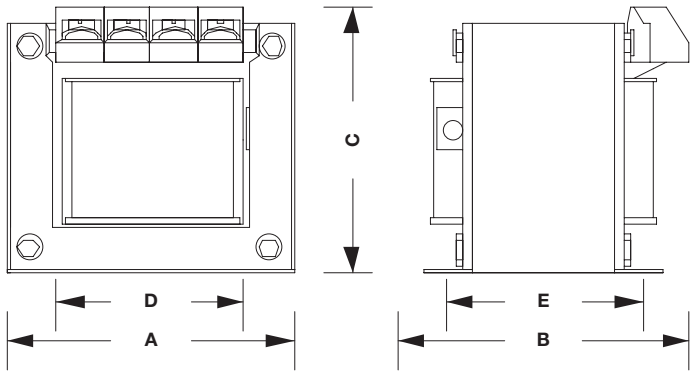
Use
Built for serious uses in particular for suspended controls and electromechanical moving units the two steel ropes are embedded diametrically opposed. To the pvc sheath the ropes cut into the appropriate lenght and amached to the control member avoid stress on the cable.

Articolo *Art.*	**Modello** *Model*	**N° cavi e sezione** *No. cable section*	**ø est.** *ø ext.*	**ø est. con fune** *ø ext. with rope*	**Formazione trefolio n./mm** *Development rope n./mm*	**Peso indic. gr/m** *Indicative weight*	**Sezione tot.** *Section mm²*
C.0815	CT0815AUAF	8x1.5	11.6	23.6	30x0.25	225	12
C.1215	CT1215AUAF	12x1.5	14.4	26.4		315	18
C.1615	CT1615AUAF	16x1.5	16	28		415	24
C.1815	CT1815AUAF	18x1.5	17	29		470	27
C.2015	CT2015AUAF	20x1.5	18	30		525	30
C.2415	CT2415AUAF	24x1.5	21	33		620	36

TRASFORMATORI MONOFASI C.A.

A.C. SINGLE-PHASE TRANSFORMERS

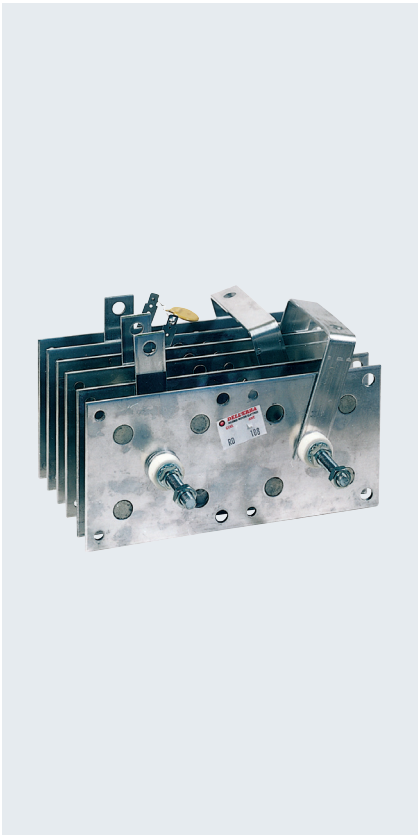




E 230 / 400				Potenza VA *Power VA*	Dimensioni mm *Dimensions mm*				
U.12 / 24	**U.24 / 48**	**U.55 / 0 / 55**	**U.110 / 0 / 110**						
Articolo *Art.*	**Articolo** *Art.*	**Articolo** *Art.*	**Articolo** *Art.*		**A**	**B**	**C**	**D**	**E**
TF.102	**TF.202**	**TF.302**	**TF.402**	50	77	60	72	62	48
TF.104	**TF.204**	**TF.304**	**TF.404**	100	87	65	80	71	53
TF.106	**TF.206**	**TF.306**	**TF.406**	200	98	80	90	82	70
TF.107	**TF.207**	**TF.307**	**TF.407**	300	122	80	120	99	64
TF.109	**TF.209**	**TF.309**	**TF.409**	500	122	100	120	100	84
TF.110	**TF.210**	**TF.310**	**TF.410**	750	152	100	145	125	93
TF.111	**TF.211**	**TF.311**	**TF.411**	1000	152	120	140	125	113

RADDRIZZATORI PER SALDATRICI E CARICABATTERIE

RECTIFIERS FOR WELDERS AND BATTERY CHARGERS



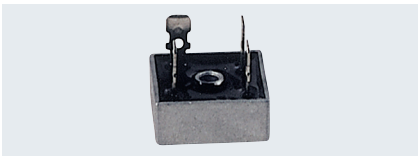
Trifase al silicio / *Three-phase silicon*

Articolo *Art.*	**Amperaggio con raffred.** *Amp. with cool.*	**Amperaggio senza raffred.** *Amp. w/o cool.*	**Numero diodi** *Number of diodes*	**Dimensioni piastre** *Plates Dim.*	**Numero piastre** *Number of plates*
RD.101	120	49	12	100x100	6
RD.102 *	160	64	18	100x100	6
RD.103	200	80	24	100x100	6
RD.105 *	180	72	18	100x200	6
RD.106	240	96	24	100x200	6
RD.107	290	118	30	100x200	6
RD.108 *	350	140	36	100x200	6
RD.110	450	180	48	100x200	6
RD.111	190	76	18	100x300	6
RD.112	260	104	24	100x300	6
RD.113	330	132	30	100x300	6
RD.114	390	156	36	100x300	6
RD.115	440	176	42	100x300	6
RD.116 *	500	200	48	100x300	6
RD.117	550	220	54	100x300	6
RD.118	600	240	60	100x300	6
RD.119	650	260	66	100x300	6
RD.120 *	700	280	72	100x300	6



Monofase al silicio / *Single-phase silicon*

Articolo *Art.*	**Amperaggio** *Amp.*	**Numero diodi** *Number of diodes*	**Dimensioni piastre** *Plates Dim.*	**Numero piastre** *Number of plates*
RD.152	10	4	70x80	2
RD.153 *	15	4	80x100	2
RD.154	20	4	100x100	2
RD.155 *	25	4	100x100	4
RD.156	30	8	100x100	4
RD.157 *	40	8	100x200	4
RD.158	50	12	100x200	4
RD.159 *	65	16	100x200	4
RD.160	80	16	100x200	8



Articolo *Art.*	**Amperaggio senza raffreddamento** *Amp. w/o cool.*	**Tensione max di ingresso** *Maximum voltage input*
BY.16	25	220/230 V a.c.
BY.35	35	220/230 V a.c.



Articolo *Art.*	**Ampere** *Amp.*	**Volt**	**Diodi** *Diodes*
DO.108	25	400	Diodi +/Diodes +
DO.109	25	400	Diodi -/Diodes -

*** IN ESAURIMENTO**
RUNNING OUT

A richiesta possiamo fornire raddrizzatori con diverso amperaggio.
On request single-phase rectifiers with different amperage can be supplied.