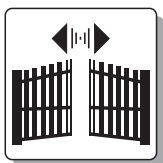




- a range of power relays with high insulation between circuits (2500 V) and 2 or 3 CO or NO contacts
- PCB mount, plug-in FASTON 187 (4.8 x 0.5 mm) or FASTON 250 (6.3 x 0.8 mm) versions available
- AC or DC coils
- dual-function test button
- module facilities: low consumption LED indicator and surge suppression diode available
- rear DIN rail mount options
- sockets and accessories: see 92 series
- approvals (according to type): IMQ, SEMKO, SEV, cUL, VDE

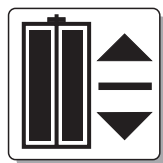
DOOR, GATE
OPENERS



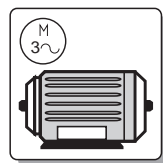
ESCALATORS



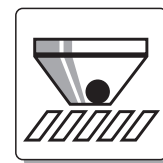
LIFTS



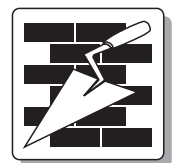
ELECTRIC
MOTOR LOADS



PLASTIC MOLDING
MACHINES



CERAMICS
INDUSTRY MACHINES





62.22



62.23 0300



P.C.B. RELAY

TYPE 62.22 2 CO (DPDT) 16 A

TYPE 62.23 3 CO (3PDT) 16 A (*)

- tin plated copper pins (1.5 x 0.8 mm)

- standard contact material: Ag CdO

- options: see coding table page 76

- ordering information: see page 76

(*) Common phase connection; if different phases are connected to adjacent contacts, then rated current = 10 A 250 V AC (P max = 2500 V A)

P.C.B. RELAY

(3 mm gap between open contacts)

TYPE 62.22 - 0300 2 NO (DPST) 20 A

TYPE 62.23 - 0300 3 NO (3PST) 16 A (*)

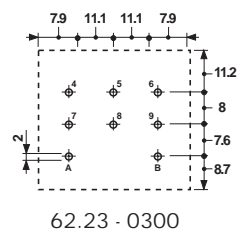
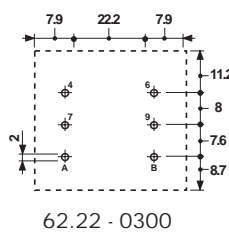
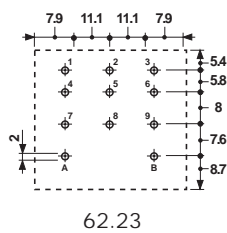
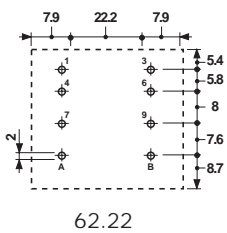
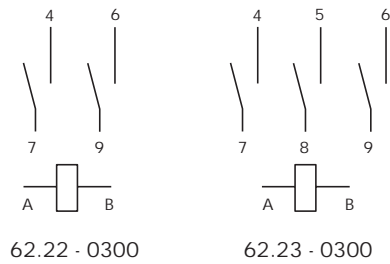
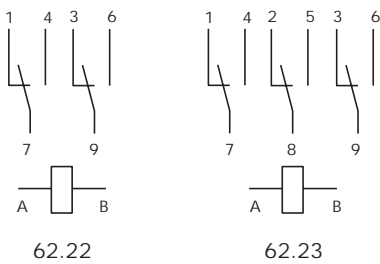
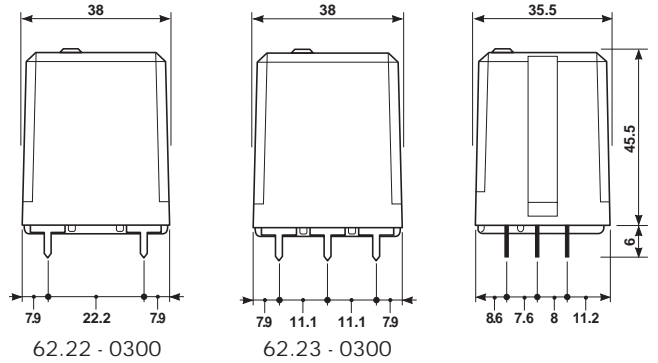
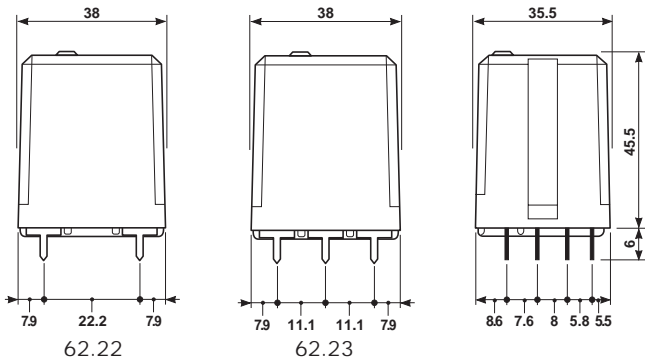
- tin plated copper pins (1.5 x 0.8 mm)

- standard contact material: Ag CdO

- options: see coding table page 76

- ordering information: see page 76

(*) Common phase connection; if different phases are connected to adjacent contacts, then rated current = 10 A 250 V AC (P max = 2500 V A)





62.32



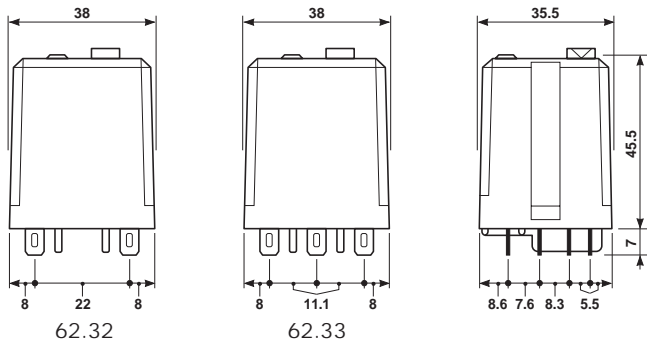
FASTON 187 PLUG-IN RELAY

TYPE 62.32 2 CO (DPDT) 16 A

TYPE 62.33 3 CO (3PDT) 16 A (*)

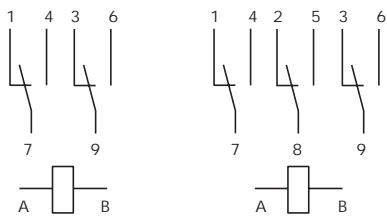
- tin plated copper connections: FASTON 187 (4.8 x 0.5 mm)
- test button, LED and diode available
- standard contact material: Ag CdO
- options: see coding table page 76
- ordering information: see page 76

(*) Common phase connection; if different phases are connected to adjacent contacts, then rated current = 10 A 250 V AC (P max = 2500 V A)



62.32

62.33



62.32

62.33



62.43



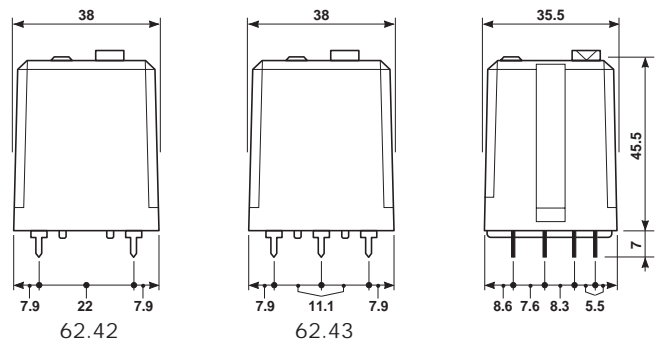
P.C.B. RELAY

TYPE 62.42 2 CO (DPDT) 16 A

TYPE 62.43 3 CO (3PDT) 16 A (*)

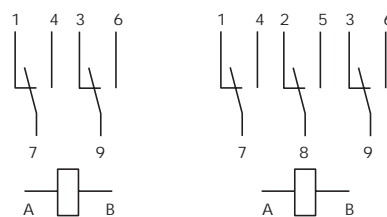
- tin plated copper pins (1.5 X 0.5 mm)
- test button, LED and diode available
- standard contact material: Ag CdO
- option: see coding table page 76
- ordering information: see page 76

(*) Common phase connection; if different phases are connected to adjacent contacts, then rated current = 10 A 250 V AC (P max = 2500 V A)



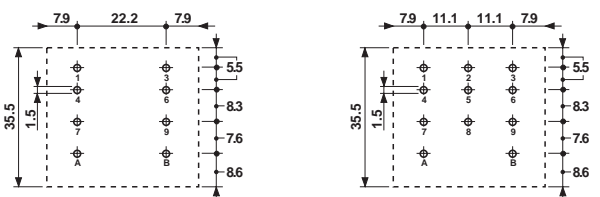
62.42

62.43



62.42

62.43



62.42

62.43



62.52



62.53 0300



P.C.B. RELAY WITH BIFURCATED TERMINALS

TYPE 62.52 2 CO (DPDT) 16 A

TYPE 62.53 3 CO (3PDT) 16 A (*)

- tin plated copper pins (1.7 x 0.8 mm)

- standard contact material: Ag CdO

- options: see coding table page 76

- ordering information: see page 76

(*) Common phase connection; if different phases are connected to adjacent contacts, then rated current = 10 A 250 V AC (P max = 2500 V A)

P.C.B. RELAY WITH BIFURCATED TERMINALS

(3 mm gap between open contacts)

TYPE 62.52 - 0300 2 NO (DPST) 20 A

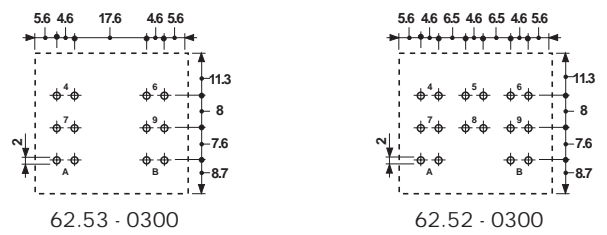
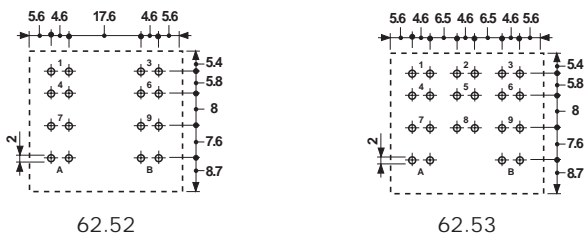
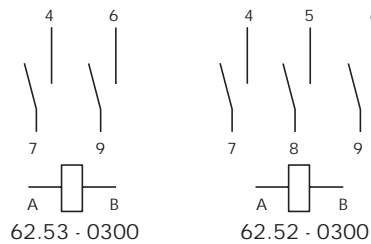
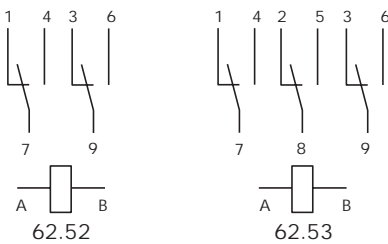
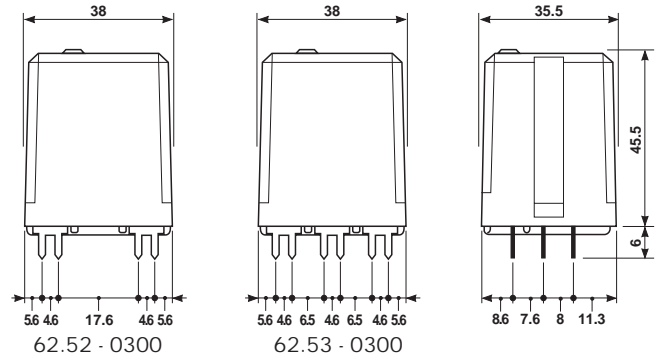
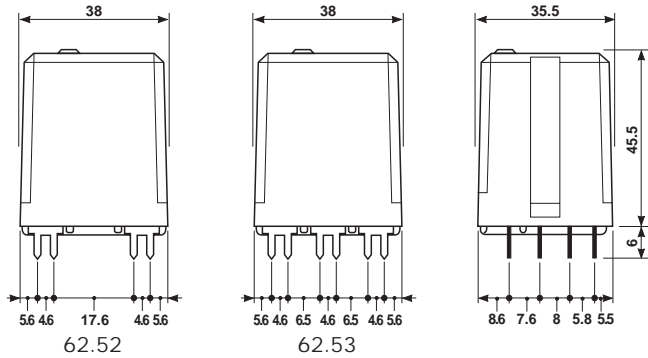
TYPE 62.53 - 0300 3 NO (3PST) 16 A (*)

- tin plated copper connections (1.7 x 0.8 mm)

- standard contact material: Ag CdO

- options: see coding table page 76

- ordering information: see page 76
 (*) Common phase connection; if different phases are connected to adjacent contacts, then rated current = 10 A 250 V AC (P max = 2500 V A)





62.62



FASTON 187 FLANGE RELAY

TYPE 62.62 2 CO (DPDT) 16 A

TYPE 62.63 3 CO (3PDT) 16 A (*)

- cover with flanges for $\varnothing 3 + 3.5$ mm screw mount
- tin plated copper connections: FASTON 187 (4.8 x 0.5 mm)
- test button, LED and diode available
- standard contact material: Ag CdO
- options: see coding table page 76
- ordering information: see page 76

(*) Common phase connection; if different phases are connected to adjacent contacts, then rated current = 10 A 250 V AC (P max = 2500 V A)



62.82



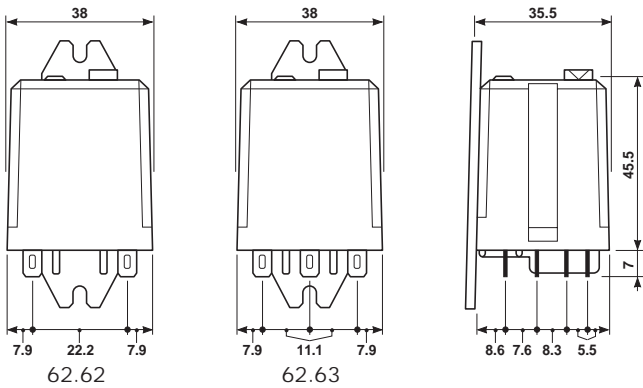
FASTON 250 FLANGE RELAY

TYPE 62.82 2 CO (DPDT) 16 A

TYPE 62.83 3 CO (3PDT) 16 A (*)

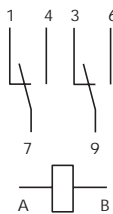
- cover with flanges for $\varnothing 3 + 3.5$ mm screw mount
- tin plated copper connections: FASTON 250 (6.3 x 0.8 mm)
- test button, LED and diode available
- standard contact material: Ag CdO
- options: see coding table page 76
- ordering information: see page 76

(*) Common phase connection; if different phases are connected to adjacent contacts, then rated current = 10 A 250 V AC (P max = 2500 V A)

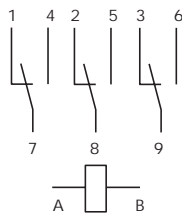


62.62

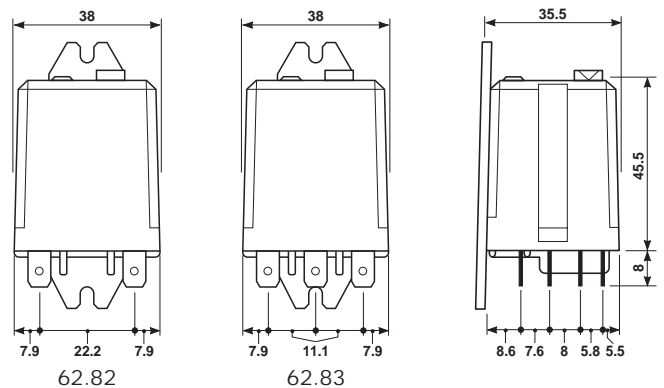
62.63



62.62

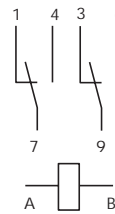


62.63

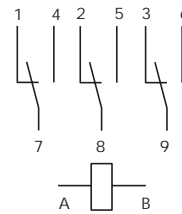


62.82

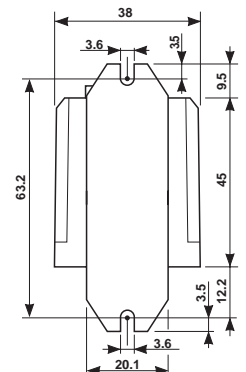
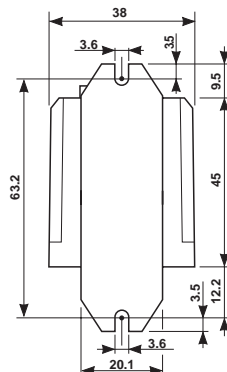
62.83



62.82



62.83





TECHNICAL DATA

DIELECTRIC STRENGTH	between coil and contacts	2500 V	
	tested at:		
	leakage current	between open contacts between open contacts NO version	1500 V 2500 V
	≤ 10 mA for 1 min at 50 Hz	between adjacent contacts between frame and live parts	2500 V relay without external ground
SURGE TEST (1.2/50μs) voltage between coil and contacts		4000 V	
INSULATION RESISTANCE		≥ 20 · 10 ³ MΩ	
INSULATION GROUP		C 400	
MAX SWITCHING FREQUENCY			
- without load:		36000 cycles/h	
- at rated load:		600 cycles/h	
AMBIENT TEMPERATURE		- 40 to + 70 °C (T max = 50°C NO version)	
MECHANICAL LIFE		AC: 10 · 10 ⁶ cycles DC: 30 · 10 ⁶ cycles	
PROTECTION CATEGORY OF ENCLOSURES		IP 40	
OPERATE AND RELEASE TIME			
pick-up time (from 0 to U _N)		≤ 30 ms (including contact bounce)	
drop-out time (from U _N to 0)		≤ 30 ms (including contact bounce)	
TYPE OF DUTY		continuous	
PICK-UP CLASS		C (according to IEC 255)	
DIELECTRIC TEST		2	
TYPE OF RELAY		all - or - nothing	

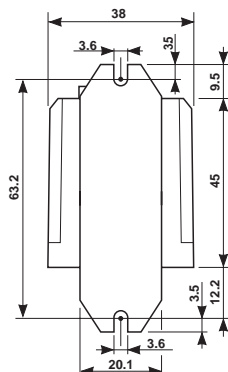
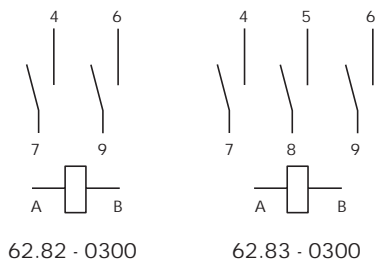
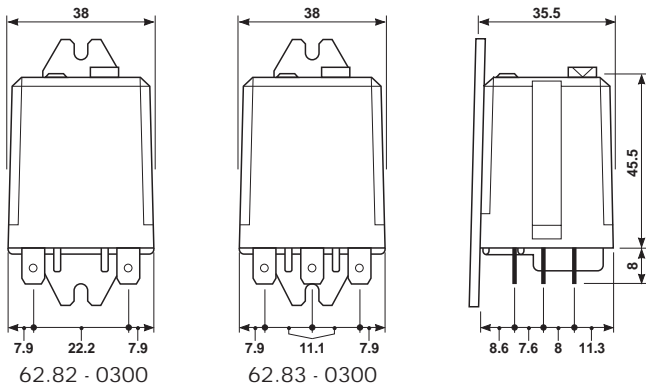
FASTON 250 FLANGE RELAY

(3 mm gap between open contact)

TYPE 62.82 - 0300 2 NO (DPST) 20 A

TYPE 62.83 - 0300 3 NO (3PST) 16 A (*)

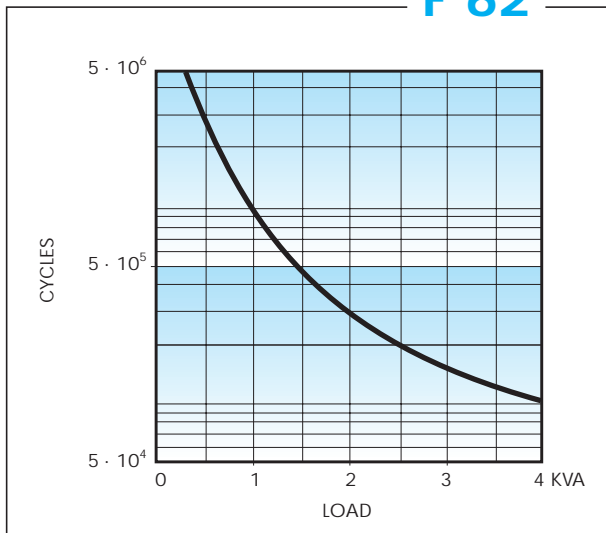
- cover with flanges for Ø 3 ± 3.5 mm screw mount
 - tin plated copper connections: FASTON 250 (6.3 x 0.8 mm)
 - test button, LED and diode available
 - standard contact material: Ag CdO
 - options: see coding table page 76
 - ordering information: see page 76
- (*) Common phase connection; if different phases are connected to adjacent contacts, then rated current = 10 A 250 V AC (P max = 2500 V A)



CONTACT SPECIFICATION

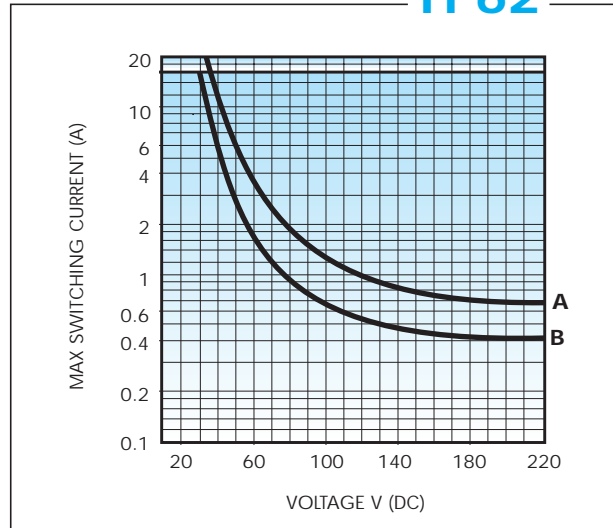
	2 - 3 CO (DPDT - 3PDT) 3 NO (3PST)	62.22 - 0300 62.52 - 0300 62.82 - 0300
NOMINAL RATE IN AC1	4000 VA	5000 VA
RATED CURRENT	16 A	20 A
MAXIMUM PEAK CURRENT	30 A	40 A
RATED VOLTAGE	250 V AC	250 V AC
MAXIMUM SWITCHING VOLTAGE	400 V AC	400 V AC
BREAKING CAPACITY IN DC1	see diagram H 62	
SINGLE PHASE HP MOTOR RATING	0.8 kW, 1.2 HP	0.8 kW, 1.2 HP
CONTACT RESISTANCE: - initial	≤ 50 mΩ	≤ 50 mΩ
STANDARD CONTACT MATERIAL	Ag CdO	Ag CdO

F 62



Contact life vs AC1 load at 600 cycles/h.

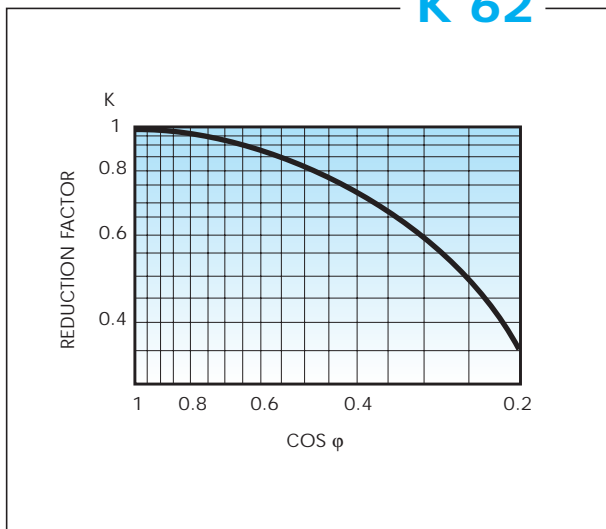
H 62



Breaking capacity for DC1 load at 600 cycles/h.
Load applied to 1 contact.

A = for relays types 62.22 - 0300 - 62.52 - 0300 and 62.82 - 0300
B = other types

K 62



Load reduction factor vs $\cos \phi$.

COIL SPECIFICATION

VERSIONS:

AC - alternating current 50/60 Hz

DC - direct current

DI - DC coil with a diode in parallel

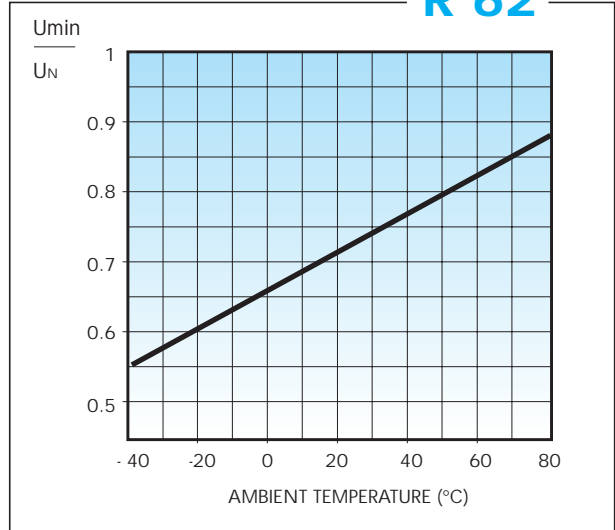
	AC	DC	AC - NO	DC - NO
RATED POWER	2.2 VA	1.3 W	3 VA	3 W
OPERATING RANGE	$0.8 \div 1.1 U_N$	$0.8 \div 1.1 U_N$	$0.85 \div 1.1 U_N$	$0.85 \div 1.1 U_N$
HOLDING VOLTAGE	$\leq 0.8 U_N$	$\leq 0.6 U_N$	$\leq 0.8 U_N$	$\leq 0.6 U_N$
MUST DROP-OUT VOLTAGE	$\geq 0.2 U_N$	$\geq 0.1 U_N$	$\geq 0.2 U_N$	$\geq 0.1 U_N$
NOMINAL MAGNETOMOTIVE FORCE	180 A	250 A	220 A	420 A
THERMAL INSULATION CLASS OF WIRE	F (+155°C)	F (+155°C)	F (+155°C)	F (+155°C)
THERMAL RESISTANCE	41°C/W	41°C/W	38°C/W	38°C/W
CONDUCTED DISTURBANCE IMMUNITY	BURST (acc. to EN 61000-4-4) level 4 (4kV) SURGE (acc. to EN 61000-4-5) level 4 (4kV)			

AC VERSION DATA (R values relate to +20°C. Tolerance of R and I values: ±10%.)

rated voltage U_N (V)	U min (V)		U max (V)		resistance R (Ω)		nominal absorption I at U_N 50 Hz (mA)		inductance with closed armature (H)	
	CO	NO	CO	NO	CO	NO	CO	NO	CO	NO
6	4.8	5.1	6.6	6.6	4.6	3.5	367	550	0.05	0.032
12	9.6	10.2	13.2	13.2	19	14	183	275	0.2	0.13
24	19.2	20.4	26.4	26.4	80	67	92	137	0.8	0.52
48	38.4	40.8	52.8	52.8	320	220	46	70	3.2	2
60	48	51	66	66	500	350	37	55	4.9	3.3
110	88	93.5	121	121	1800	1200	20	30	16.5	11
125	100	106	137	137	2000	1400	17.6	26	22	14.6
230	184	196	253	253	7250	5000	10.4	14	66	50
240	192	204	264	264	8500	5300	9.2	13.2	78	55

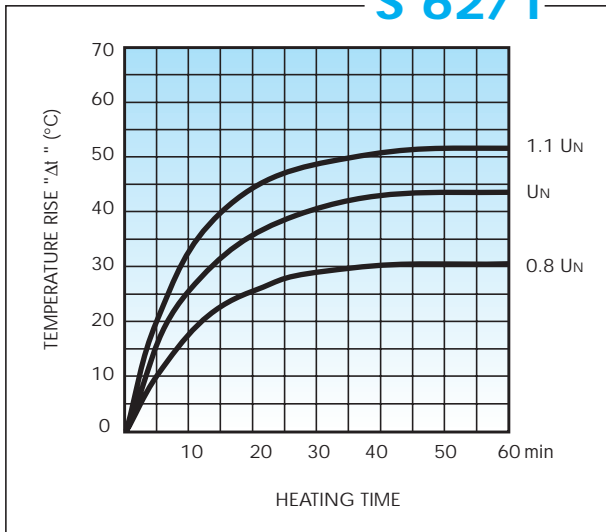
DC VERSION DATA (R values relate to +20°C. Tolerance of R and I values: ±10%.)

rated voltage U_N (V)	U min (V)		U max (V)		resistance R (Ω)		nominal absorption I at U_N (mA)	
	CO	NO	CO	NO	CO	NO	CO	NO
6	4.8	5.1	6.6	6.6	28	12	214	500
12	9.6	10.2	13.2	13.2	110	48	109	250
24	19.2	20.4	26.4	26.4	445	192	54	125
48	38.4	40.8	52.8	52.8	1770	770	27	63
60	48	51	66	66	2760	1200	21.7	50
110	88	93.5	121	121	9420	4000	11.7	27
125	100	106	137	137	12000	5200	10.4	24



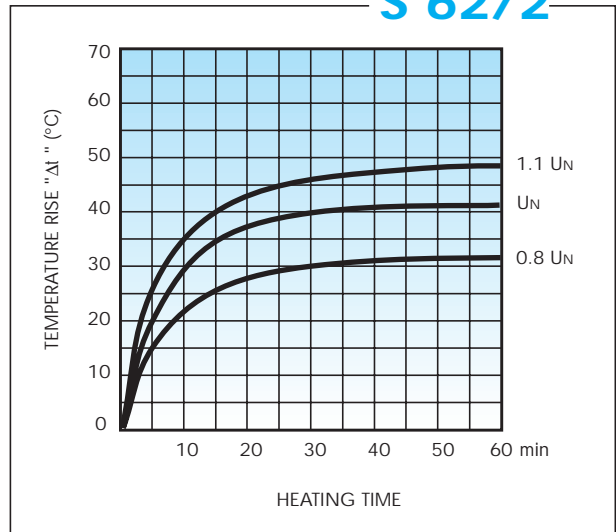
DC coil min pick-up voltage vs ambient temperature.
Valid for CO (DPDT) types.
U_{min} = pick-voltage U_N = rated voltage

S 62/1



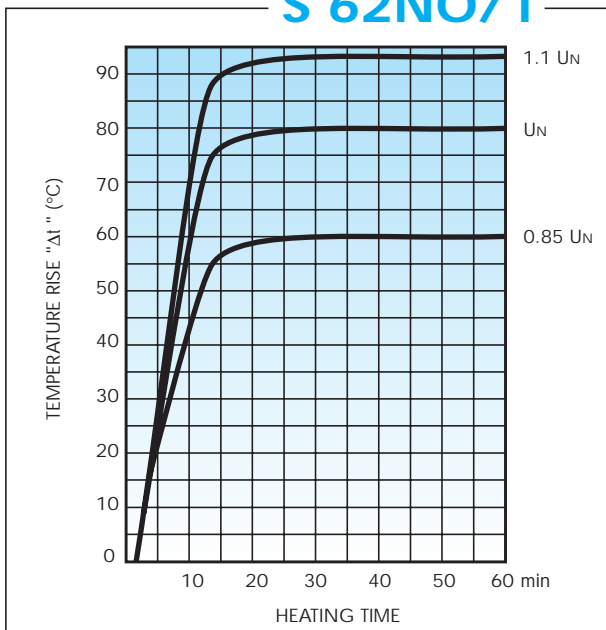
Temperature rise "Δt" vs applied voltage. DC coils.

S 62/2



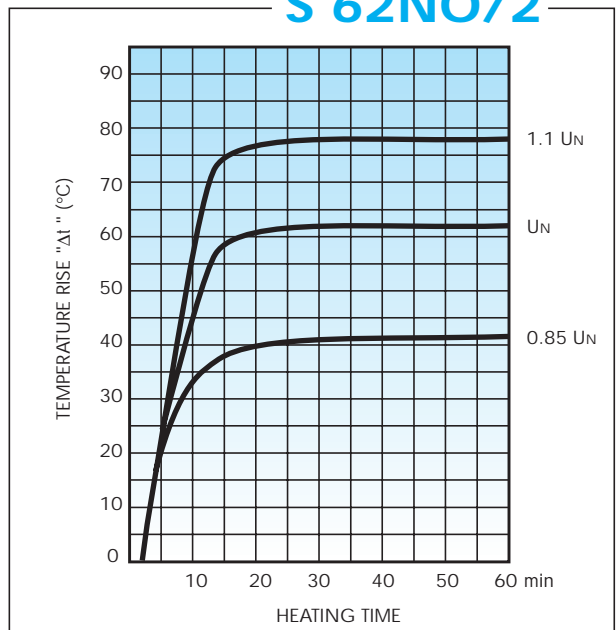
Temperature rise "Δt" vs applied voltage. AC 50 Hz coils.

S 62NO/1



Temperature rise "Δt" vs applied voltage. DC coils, NO version.

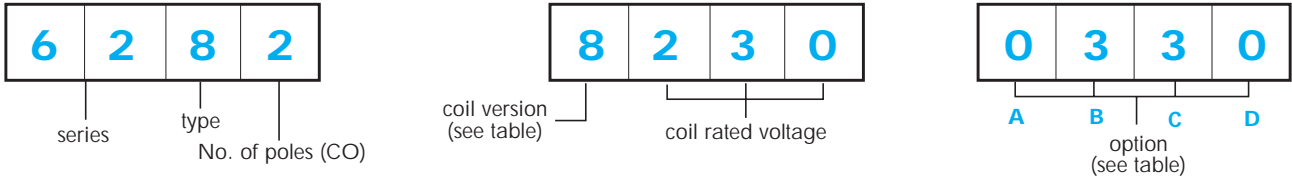
S 62NO/2



Temperature rise "Δt" vs applied voltage. AC 50 Hz coils, NO version.

ORDERING INFORMATION

Example: a 62 series FASTON 250 connection relay with 2 CO (DPDT) rated at 230 V AC with NO contacts and LED has the following code:



For standard relays with no options, use the first 8 digits only.

COIL VERSIONS

Code	Coil types	
9	DC	Direct current
8	AC	Alternating current at 50/60 Hz
3	DI	Direct current with a diode in parallel to coil

OPTIONS

(* Available for DC coil only)

A	Contact material	B	Circuit contact	C	Additional features	D	Special applications
0	standard	0	standard	0	standard	0	standard
		3	NO	1	test button	5	top mount flange
				3	LED (AC)	7	top DIN rail mount
				5	test button + LED, AC only	8	rear DIN rail mount
				*6	LED + diode (positive to A) DC only		
				*7	test button + LED + diode (positive to A) DC only		
				*8	LED + diode (positive to B) DC only		
				*9	test button + LED + diode (positive to B) DC only		



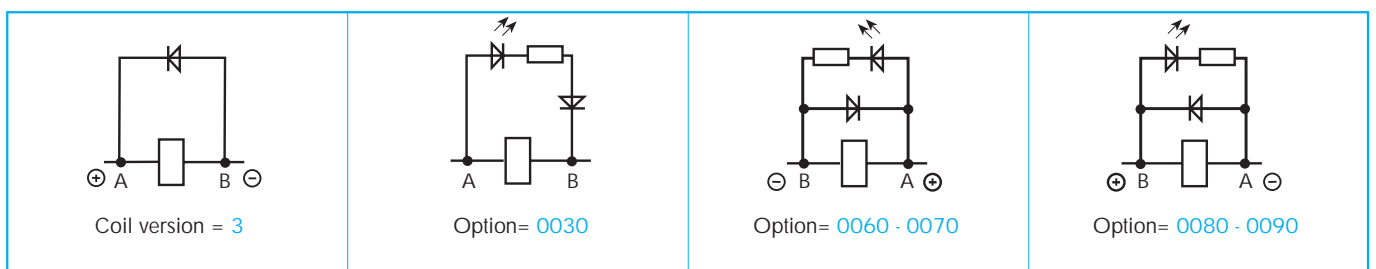
REAR DIN 46277 RAIL MOUNT (0008)



TEST BUTTON (0010)



LED (0030)



92 SERIES

SOCKETS & ACCESSORIES FOR 62 SERIES RELAYS



- a range of sockets and accessories for the 62 series relays
- solder, screw terminal, PCB, panel or DIN rail 46277 mount versions available
- IP 20 finger protection with additional plastic cover
- flammability in accordance with UL 94
- approvals (according to type): SEV, cUL



92.13



P.C.B. SOCKET (flange mount with M3 screws)

TYPE 92.13 for relays types 62.32 - 62.33

Accessories: retaining clip **TYPE 092.54**

SOLDER CONNECTIONS SOCKET

TYPE 92.33 for relays types 62.32 - 62.33

Accessories: retaining clip **TYPE 092.54**

CHARACTERISTICS

- LOAD: 32 A 250 V (10 A max for each contact circuit)
- INSULATION RESISTANCE: $\geq 10^3 \text{ M}\Omega$
- DIELECTRIC STRENGTH: $\geq 2.5 \text{ kV AC}$
- BODY MATERIAL: self-extinguishing PPEm (V1)
- CONNECTIONS: Cu Zn 33 tin plated



92.43.1



**SCREW TERMINAL SOCKET
(panel or DIN rail 46277 mount)**

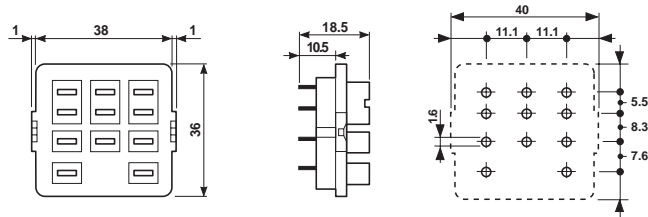
TYPE 92.43.1 for relays types 62.32 - 62.33

Accessories: retaining clip **TYPE 092.53**

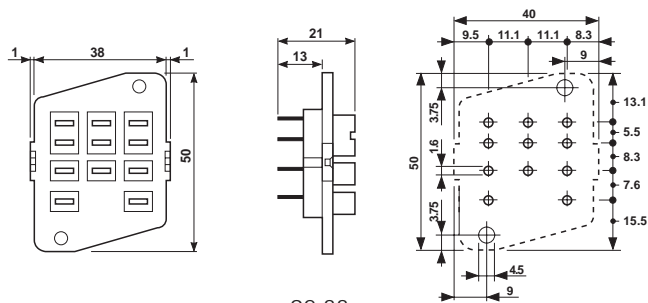
IP 20 protective cover **TYPE 092.55**

CHARACTERISTICS

- LOAD: 16 A 250 V
- INSULATION RESISTANCE: $\geq 10^3 \text{ M}\Omega$
- DIELECTRIC STRENGTH: $\geq 2.5 \text{ kV AC}$
- BODY MATERIAL: self-extinguishing PPEm (V1)
- CONNECTIONS: Cu Zn 33 nickel plated
- Non removable pozidrive slotted terminal screws.



92.13



92.33

