

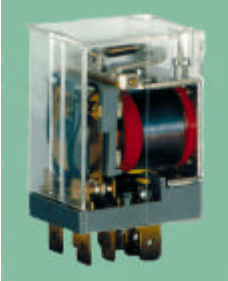





# GENERAL CATALOGUE OF MALLOL ASETYC, S.A.

Avda. de la Industria, 36 - 28108 Alcobendas (Madrid)




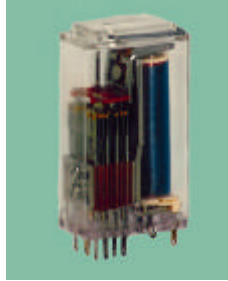
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[www.asetyc.com](http://www.asetyc.com) - e.mail: [clientes@asetyc.com](mailto:clientes@asetyc.com)

SERIES	L	J	M	Q
(1) Others spring sets upon request p.e.: 2NO-3NC, etc.				
(2) A(NO)=normally open, high current R(NC)=normally closed, high current U(CO)=changeover, high current  a(NO)=normally open, low current r (NC)=normally closed, low current u (CO)=changeover, low current				
Dimensions mm	26x29x49	92x38x20	47x35x22	78x53x28
Weight g	85	200	80-160	100
<b>EXECUTION</b>				
Solder connections				
Plugin	LC - LA	J	MC - MA	Q
Faston mm	6,3			
Protected		JP		QP
<b>SOCKETS</b>	Mounting plate		Solder connections	
<b>COIL CIRCUIT</b>				
Rated voltage DC V=	6-110	6-220	6-110	6-220
AC V~	6-220		6-220	
Rated power DC W	1-1,2	0,40	1-1,30	0,70
AC VA	2-2,5		2,50-3	
Operating power W	0,70	0,25	0,80	0,40
Ambient temperature °C	-20/+70	-20/+70	-20/+50	-20/+70
Pull-in time ms	10-33	10-30	15-25	10-30
Drop-out time ms	3-10	3-8	3-8	3-8
Thermal rating W	2	6	3	3
of coil at 40 °C VA	3		4,50	
Test voltage				
Winding/Frame V~ eff.	2000	1500	2000	1000

<b>CONTACT CIRCUIT(1)</b>		Different contacts Max. 24 springs with twin contacts Max. 18 springs with heavy-current contacts	Different contact-types Maximum: 12 springs	Different contacts Max. 24 springs with twin contacts Max. 18 springs with heavy-current contacts
Contact arrangement(2)	2U			
Contact material	Ag			
Switching voltage (resistive load) V=	220	110/220	110	110/110
V~	380	125/250	250	125/250
Switching current A	20	1 / 6	10	1 / 6
Switching power W	150	30/50	90	30/50
VA	3000	120/400	2500	120/400
Test voltage				
Contact/Frame V~ eff.	2000	1000/2000	2000	1000/2000
Contact/Contact V~ eff.	1500	1000/2000	2000	1000/2000

<b>GENERAL DATA</b>				
Mechanical life Operations	10 <sup>7</sup>	10 <sup>7</sup>	20x10 <sup>6</sup>	10 <sup>7</sup>
Isolating group acc./VDE 0110	B/250V~	A/250V~	B/250V~	A/250V~
Protection acc./DIN 40050	IP40	IP00/IP40	IP00/IP40	IP00





SERIES		V	W	WR	Z
(1) Others spring sets upon request Ej.: 2NO-3NC, etc.					
(2) A(NO)=normally open, high current R(NC)=normally closed, high current U(CO)=changeover, high current  a (NO)=normally open, low current r (NC)=normally closed, low current u (CO)=changeover, low current					
Dimensions	mm	19X30X37	19x30x30	19x24x30	19x30x54
Weight	g	35	28	25	60
<b>EXECUTION</b>					
For printed circuit			WS	WRS	
Solder connections		V	W	WR	Z
Plugin		V	W	WR	Z
<b>SOCKETS</b>		Solder connections- Printed circuit	Solder connections- Printed circuit	Solder connections- Printed circuit	Solder connections- Printed circuit
<b>COIL CIRCUIT</b>					
Rated voltage	DC V=	6-110	6-110	6-110	6-220
Rated power	DC W	0,80	0,80	0,80	0,80
Operating power	W	0,40	0,40	0,40	0,40
Ambient temperature	°C	-25/+70	-25/+70	-25/+70	-25/+70
Pull-in time	ms	8-15	8-15	8-10	10-25
Drop-out time	ms	1,50-6	1,50-6	1,50-5	3-8
Thermal rating of coil at 40°C	W	1,80	1,80	1,80	2,50
Test voltage	V <sub>eff</sub>	500	500	500	500
Winding/Frame					

<b>CONTACT CIRCUIT (1)</b>					
<b>Contact arrangement (2)</b>		6 x a - 6 x r - 4 x u 2 x A - 2 x R - 2 x U	6 x a - 6 x r - 4 x u 2 x A - 2 x R - 2 x U	2 x a - 2 x r - 2 x u 2 x A - 2 x R - 2 x U	6 x a - 6 x r - 4 x u 2 x A - 2 x R - 2 x U
<b>Contact material</b>		Fine Silver/Hard Silver	Fine Silver/Hard Silver	Fine Silver/Hard Silver	Fine Silver/Hard Silver
<b>Switching voltage (resistive load)</b>	V=	110	110	110	110
	V~	125/250	125/250	125/250	125/250
<b>Switching current</b>	A	1/4	1/4	1/4	1/4
<b>Switching power</b>	W	30/60	30/60	30/50	30/60
	VA	120/500	120/500	120/500	120/500
<b>Test voltage</b>					
<b>Contact/Frame</b>	V <sub>eff</sub>	500/1000	500/1000	500	500/1000
<b>Contact/Contact</b>	V <sub>eff</sub>	500/1000	500/1000	500	500/1000

<b>GENERAL DATA</b>					
<b>Mechanical life</b>	Operations	10 <sup>7</sup>	10 <sup>7</sup>	10 <sup>7</sup>	10 <sup>7</sup>
<b>Isolating group acc./VDE 0110</b>		A/250V~	A/250V~	A/250V~	A/250V~
<b>Protection acc./DIN 40050</b>		IP40	IP40	IP40	IP40

CMPREL14-1000

PLEASE DEMAND SAMPLES AND SPECIAL INFORMATION.

SERIES		B	C	D	H
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Dimensions	mm	26x32x45	26x32x45	26,6x27,5x33,5	35,5x35,5x50
Weight	g	65	60	30	75
<b>EXECUTION</b>					
For printed circuit		BS	CS	DS	HS
Solder connections		BF	CF	DF	HF
Plugin		BF		DF	HF/HK
Faston	mm	2,8	6,3		
Magnetic arc-suppression		BMS BMF			
<b>SOCKETS</b>		Solder connections-Printed circuit-DIN Rail		Solder connections-Printed circuit-DIN Rail	
<b>COIL CIRCUIT</b>					
Rated voltage	DC V=	6-110	6-110	6-110	6-110
	AC V~	6-220	6-220	6-220	6-220
Rated power	DC W	1-1,20	1-1,20	0,90	1-1,20
	AC VA	2-2,20	2-2,20	1,40	2-2,20
Operating power	W	0,65	0,70	0,80	0,65
Ambient temperature	°C	-20/+70	-20/+70	-20/+50	-20/+70
Pull-in time	ms	15	15	9	15
Drop-out time	ms	5	5	4	8
Thermal rating of coil at 40°C	W	1,80	1,80	1,20	1,80
	VA	2,60	2,60	2,00	2,60
Test voltage					
Winding/Frame	V~ eff.	2000	2000	1500	2000


CONTACT CIRCUIT(1)					
Contact arrangement(2)		2U-3U	2U	2U-4u	2U-3U
Magnetic arc-suppression		BM:2xU			
Contact material		AgNi	AgNi	AgNi	AgNi
Switching voltage (resistive load)	V=	110	110	110	110
	V~	250	250	250	250
Switching current	A	10	16/20	10 / 5	10
Switching power	W	150	200/350	240 / 120	150
	VA	2500	4000/5000	2500 / 1250	2500
Test voltage					
Contact/Frame	V~ eff.	2000	2000	2000	2000
Contact/Contact	V~ eff.	2000	2000	2000	2000




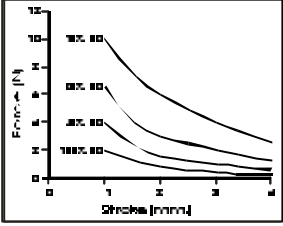
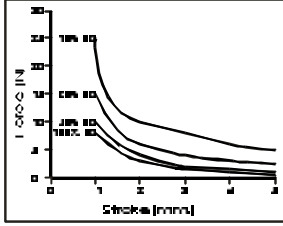
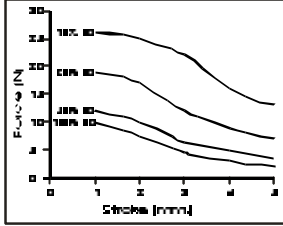
GENERAL DATA					
Mechanical life	Operations	10 <sup>7</sup>	10 <sup>7</sup>	20x10 <sup>6</sup>	10 <sup>7</sup>
Isolating group acc./VDE 0110		B/250V~	B/250V~	B/250V~	B/250V~
Protection acc./DIN 40050		IP40	IP40	IP40	IP40

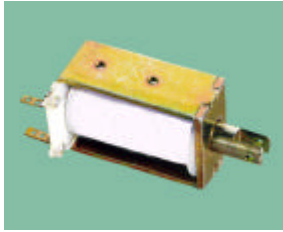


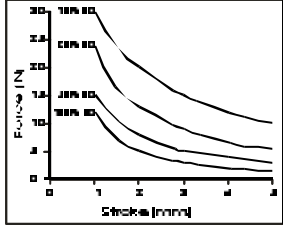
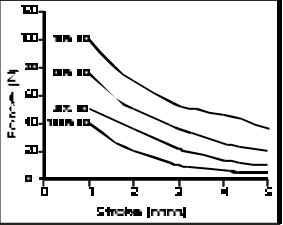
CM PREL 11-1000

PLEASE DEMAND SAMPLES AND SPECIAL INFORMATION.

SERIES		SSN	SSP	SSPN	SSR
<p>(1) Others spring sets upon request Ej.: 2NO-3NC, etc.</p> <p>(2) A(NO)=normally open, high current R(NC)=normally closed, high current U(CO)=changeover, high current</p> <p>a (NO)=normally open, low current r (NC)=normally closed, low current u (CO)=changeover, low current</p>					
Dimensions	mm	25x13x22	26x22,5x11	30,5x25,3x11,2	29x26x12
Weight	g	14	12	15	20
<b>EXECUTION</b>					
For printed circuit		SSN	SSP	SSPN	SSR
<b>SOCKETS</b>					Printed circuit - Screw-DIN-Rail
<b>COIL CIRCUIT</b>					
Rated voltage	DC V=	6-60	6-60	6-60	6-110
Rated power	DC W	0,80	0,55	1,00	0,80
Operating power	W	0,60	0,30	0,60	0,55
Ambient temperature	°C	-25/+70	-25/+70	-25/+70	-25/+70
Pull-in time	ms	6-9	8	9	8-10
Drop-out time	ms	2-5	4	4	2-3,50
Thermal rating of coil at 40°C	W	1,00	0,90	1,00	1,20
Test voltage					
Winding/Frame	V~ eff.	500	500	500	1000
<b>CONTACT CIRCUIT (1)</b>					
Contact arrangement (2)		1 x A - 1 x U 2 x u	1u	2U	1 x A - 1 x R - 1 x U (2 x A - 2 x R - 2 x U)
Contact material		Hard Silver	Hard Silver	Hard Silver	AgCdO (AgNi)
Switching voltage	V=	110	60	60	110
(resistive load)	V~	250	125	250	250
Switching current	A	6(2)	2	5	10(8)
Switching power	W	50(30)	50	50	90(60)
	VA	600(180)	200	1250	2500(1100)
Test voltage					
Contact/Frame	V~ eff.	2000	1000	2000	4000/8mm
Contact/Contact	V~ eff.	2000	1000	2000	2000
<b>GENERAL DATA</b>					
Mechanical life	Operations	10 <sup>7</sup>	10 <sup>7</sup>	10 <sup>7</sup>	10 <sup>7</sup>
Isolating group acc./VDE 0110		B/250V~	B/250V~	B/250V~	B/250V~
Protection acc./DIN 40050		IP30	IP40	IP40	IP40

SERIE		D
<p>(1) Others spring sets upon request p.e.: 2NO-3NC, etc.</p> <p>(2) A(NO)=normally open, high current R(NC)=normally closed, high current U(CO)=changeover, high current</p> <p>a(NO)=normally open, low current r (NC)=normally closed, low current u (CO)=changeover, low current</p> <p>Dimensions mm Weight g</p>		 <p>26,6x27,5x33,5 30</p>
<b>EXECUTION</b>		
<p>For printed circuit Solder connections Plugin Faston mm Magnetic arc-suppression</p>		DS
<b>SOCKETS</b>		-----
<b>COIL CIRCUIT</b>		
Rated voltage	DC V= AC V~	6-12-24-48 230
Rated power	DC W AC VA	0,90 1,40
Operating power	W	0,80
Ambient temperature	°C	-20/+40
Pull-in time	ms	9
Drop-out time	ms	4
Thermal rating of coil at 40°C	W VA	1,20 2,00
Test voltage Winding/Frame	V~ eff.	1500
<b>CONTACT CIRCUIT(1)</b>		
Contact arrangement(2)		2A
Contact clearance mm		1,9
Contact material		AgNi
Switching voltage (resistive load)	V~	250
Rated uninterrupted current I(u)	A	15
Rated operational current I(e)	A	10
Rated uninterrupted power	VA	3.750
Rated operational power	VA	2.500
Test voltage Contact/Frame	V~ eff.	2000
Contact/Contact	V~ eff.	2000
<b>GENERAL DATA</b>		
Mechanical life Operations		20x10 <sup>6</sup>
Isolating group acc./VDE 0110		B/250V~
Protection acc./DIN 40050		Ip40
Approvals		UL, TÜV

SERIES		EM	E	EN
<b>EXECUTION</b>				
<p>Available different executions for special requirements:</p> <ul style="list-style-type: none"> <li>- Bobbin with brass tube</li> <li>- Bobbin of nylon, without brass tube</li> <li>- Solder connections</li> <li>- Connection by cables</li> <li>- Terminals for printed circuit</li> <li>- We are able to develop in cooperation with our customers custom solutions</li> <li>- Special nucleus upon request</li> </ul>				
Dimensions	mm	17,5x17,2x19,5	19x22,5x35	22x30x39
Weight	g	25	60	100
Terminals		Solder connections	Solder connections-Cables	Solder connections-Cables
<b>COIL CIRCUIT</b>				
Rated Voltage	DC V=	6-60	6-60	6-60
Power	DC W	2	5	5,5

SERIES		F	G	EP
<b>APPLICATION</b>				
<ul style="list-style-type: none"> <li>- In HI-Fland video</li> <li>- In office machines</li> <li>- In motor car accessories</li> <li>- In white goods</li> <li>- In automatic devices</li> <li>- In security doors and safes</li> </ul>				<p><b>Single- or double winding</b></p> <p>The advantage of the polarized solenoid is the pulsed driven operation of 20ms. Therefore there is a low need of setting power and the coil heating can be neglected.</p> <p>The polarized solenoid is designed by a high resistance to shocks and vibrations. They are always in a defined position and therefore there is no loss of information in case of power failure.</p>
Dimensions	mm	23x26,5x41	38x53x48,5	27x27x13
Weight	g	105	280	20
Terminals		Solder connections-Cables	Solder connections, Faston 6,3mm	For printed circuit
<b>COIL CIRCUIT</b>				
Rated voltage	DC V=	6-60	6-60	6-60
Power	DC W	6	12	

CM/PELE11-06/99

PLEASE DEMAND SAMPLES AND SPECIAL INFORMATION.

SNAP-IN  
MOUNTING  
**SZAS**  
**SZCS**

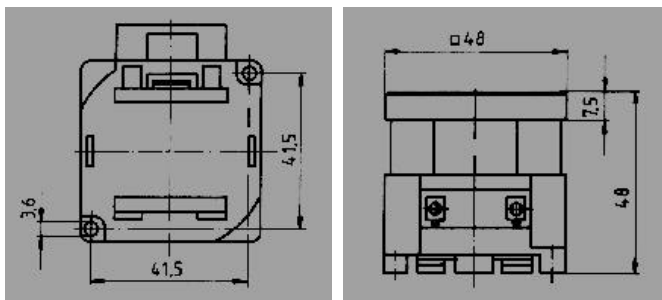


**SZAE**  
**SZCE**  
PANEL  
MOUNTING

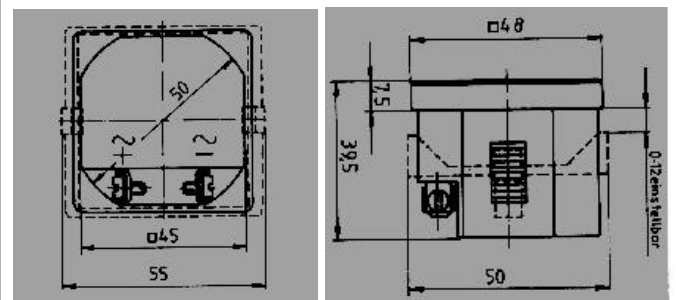
**RATINGS:**

- VOLTAGES AC: SZA : 24, 110, 220, 380 V 50 Hz or 60Hz
- VOLTAGES DC: SZC: 12, 24, 125V = .(with multiplier 220V =)
- PERMISSIBLE VOLTAGE FLUCTUATIONS: + / - 15 %
- POWER CONSUMPTION: 1 VA / 0,5 W
- AMBIENT TEMPERATURE: -20°C a + 60°C
- OPERATION ACCURACY: AC: Mains synchronous/ DC: Quarz

- COUNTING RANG: 99.999,99 with indications
- TERMINALS: Faston 6,3mm tab, or screw terminals
- MOUNTING SZAS - SZCS: With 2 screw fitting or snap in carrier rail 35x7,5mm
- MOUNTING SZAE - SZCE: Panel thickness to 12mm in top panels with 45,5 x 45,5 or 50,5mm (2") round
- ENCLOSURES: Black
- BEZEL (for circular cut-out):  
 SZE0001 (72 x 72mm)  
 SZE0002 (55 x 55mm)



48 x 48 x 48 mm.  
**SZAS - SZCS**



48 x 48 x 39,5 mm.  
**SZAE - SZCE**