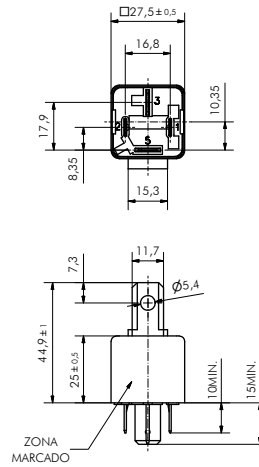


## CARACTERISTICAS

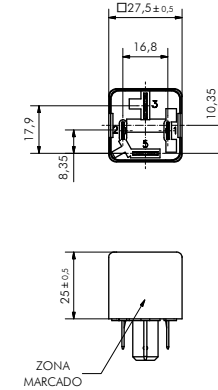
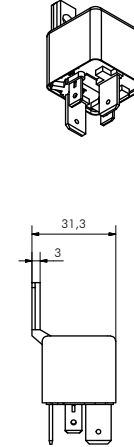
- 1.- TENSION NOMINAL: 12 V.
- 2.- TENSION DE FUNCIONAMIENTO: 8 V. A 16 V.
- 3.- TEMPERATURA DE FUNCIONAMIENTO: -30°C A +80°C.
- 4.- TENSION DE CIERRE:  $\leq 8$  V.
- 5.- TENSION DE APERTURA: 0,8 V.  $\leq U \leq 3,5$  V.
- 6.- TIEMPO DE CIERRE:  $\leq 5,5$  mseg.
- 7.- TIEMPO DE APERTURA:  $\leq 1,8$  mseg.
- 8.- CORRIENTE DE CONMUTACION: 70 A.
- 9.- RESISTENCIA DE CONTACTOS: 2 m $\Omega$   $\pm 15\%$ .
- 10.- RESISTENCIA BOBINA (25°C): 55  $\Omega$   $\pm 10\%$ .
- 11.- INDUCTANCIA BOBINA: 32 mH.  $\pm 10\%$ .
- 12.- TEMPERATURA BOBINA: 100°C DESPUES 1 HORA SIN CARGA.
- 13.- DURACION:
  - \* TENSION: 13,5 V.
  - \* TEMPERATURA: 23°C  $\pm 5\%$ .
  - \* CARGA: 70 A. INDUCTIVA (0,5 mH.).
  - \* NUMERO CICLOS: 100.000; 2 seg. ON, 2 seg. OFF.
- 14.- MATERIALES:
  - \* TAPA: PA6.6 CON 15% F.V. (NEGRO).
  - \* BASE: PA6.6 CON 30% F.V. (NATURAL).
  - \* TERMINALES: (1), (86) 6,3x0,8 HIERRO AP02 CuNiSn.
  - (2), (85) 6,3x0,8 HIERRO AP04 CuNiSn.
  - (3), (5), (30), (87) 9,5x1,2 Cu Ag.
  - \* DIODO: 1N4007.
  - \* RESISTENCIA: 475  $\Omega$ .

## SPECIFICATIONS

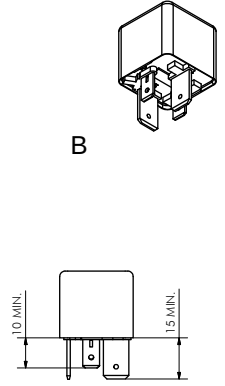
1. NOMINAL VOLTAGE: 12 V.
2. OPERATING VOLTAGE: 8 V. TO 16 V.
3. OPERATING TEMPERATURE: -30°C TO +80°C.
4. CLOSURE VOLTAGE:  $\leq 8$  V.
5. OPENING VOLTAGE: 0.8 V.  $\leq U \leq 3.5$  V.
6. CLOSURE TIME:  $\leq 5.5$  msec.
7. OPENING TIME:  $\leq 1.8$  msec.
8. COMMUTATION CURRENT: 70 A.
9. CONTACTS RESISTANCE: 2 m $\Omega$   $\pm 15\%$ .
10. COIL RESISTANCE (25°C): 55  $\Omega$   $\pm 15\%$ .
11. COIL INDUCTANCE: 32 mH  $\pm 10\%$ .
12. COIL TEMPERATURE: 100°C AFTER 1 HOUR WITHOUT LOAD.
13. ENDURANCE:
  - \* VOLTAGE: 13.5 V.
  - \* TEMPERATURE: 23°C  $\pm 5\%$ .
  - \* LOAD: 70 A. INDUCTIVE (0.5 mH).
  - \* CYCLES NUMBER: 100,000; 2 secs ON, 2 secs OFF.
14. MATERIALS:
  - \* COVER: PA6.6 WITH 15% G.F. (BLACK).
  - \* BASE: PA6.6 WITH 30% G.F. (NATURAL).
  - \* TERMINALS: (1), (86) 6.3 x 0.8 IRON AP02 CuNiSn.
  - (2), (85) 6.3 x 0.8 IRON AP04 CuNiSn.
  - (3), (30) 9.5x1.2 Cu Ag.
  - \* DIODE: 1N4007.
  - \* RESISTANCE: 475  $\Omega$ .



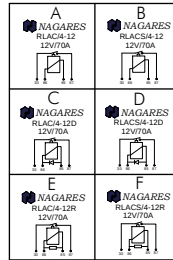
A



B



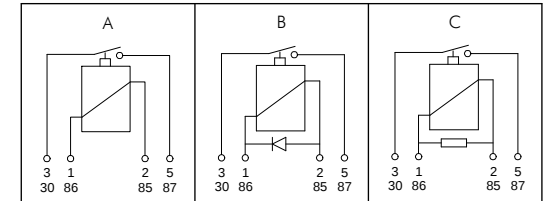
## MARCADO PRINTING



## ENTRADAS / SALIDAS INPUTS/OUTPUTS

|   |    |                                |
|---|----|--------------------------------|
| 1 | 86 | EXCITACION (+ O -) / EXCITING  |
| 2 | 85 | EXCITACION (+ O -) / EXCITING  |
| 3 | 30 | POSITIVO / POSITIVE            |
| 5 | 87 | SALIDA CIERRE / CLOSURE OUTPUT |

## ESQUEMA CONEXIONES CONNECTION DIAGRAM



| REFERENCIA  | REFERENCIA CLIENTE | DENOMINACION                           | PESO | SOPORTE | ESQUEMA | MARCADO |
|-------------|--------------------|----------------------------------------|------|---------|---------|---------|
| RLAC/4-12   |                    | RELE 70 A. 12 V.                       | 32,5 | A       | A       | A       |
| RLACS/4-12  |                    | RELE 70 A. 12 V. SIN SOPORTE           | 32   | B       | A       | B       |
| RLAC/4-12D  |                    | RELE POLIVALENTE 70 A. CON DIODO       | 32,5 | A       | B       | C       |
| RLACS/4-12D |                    | RELE POLIVALENTE 70 A. CON DIODO       | 32   | B       | B       | D       |
| RLAC/4-12R  |                    | RELE POLIVALENTE 70 A. CON RESISTENCIA | 32,5 | A       | C       | E       |
| RLACS/4-12R |                    | RELE POLIVALENTE 70 A. CON RESISTENCIA | 32   | B       | C       | F       |

## PART NUMBERS

| PART NUMBER | CUSTOMER'S PART NUMBER | DESIGNATION                           | WEIGHT | BRACKET | SCHEME | PRINTING |
|-------------|------------------------|---------------------------------------|--------|---------|--------|----------|
| RLAC/4-12   |                        | RELAY 70 A. 24 V.                     | 32,5   | A       | A      | A        |
| RLACS/4-12  |                        | RELAY 70 A. 12 V. WITHOUT BRACKET     | 32     | B       | A      | B        |
| RLAC/4-12D  |                        | RELAY WITH DIODE VERSATILE 70 A.      | 32,5   | A       | B      | C        |
| RLACS/4-12D |                        | RELAY WITH DIODE VERSATILE 70 A.      | 32     | B       | B      | D        |
| RLAC/4-12R  |                        | RELAY WITH RESISTANCE VERSATILE 70 A. | 32,5   | A       | C      | E        |
| RLACS/4-12R |                        | RELAY WITH RESISTANCE VERSATILE 70 A. | 32     | B       | C      | F        |

|                                                                                                                      |                                                                                        |              |                    |
|----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|--------------|--------------------|
| 2                                                                                                                    | Corrección denominación de las piezas.                                                 | 09/04/2014   | J.L. Cepeda        |
| 1                                                                                                                    | Se añade traducción al inglés. Modificación índices, pasan de alfabéticos a numéricos. | 08/09/2009   | J.M.P. Núñez       |
| A                                                                                                                    | Modificación resistencia bobina, pasa de 46 a 55 $\Omega$ .                            | 06/09/2006   | S. Fernandez       |
| 0                                                                                                                    | Edición.                                                                               | 05/12/2002   | J.M.P. Núñez       |
| Rev.                                                                                                                 | Descripción                                                                            | Fecha        | Aprobado           |
| Historial Revisiones                                                                                                 |                                                                                        |              |                    |
| Elaborado: Fecha                                                                                                     | Rel. Nágares                                                                           | Rel. Cliente | Denominación Plano |
| Aprobado: Fecha                                                                                                      | J.M.P. Núñez - 05/12/2002                                                              |              |                    |
| J.M.P. Núñez - 05/12/2002                                                                                            |                                                                                        |              |                    |
| Material                                                                                                             |                                                                                        | Acabado      | Nº Plano           |
| Peso (gr.)                                                                                                           |                                                                                        | Proyecto     | Índice             |
| Escala                                                                                                               |                                                                                        | Formato      | Hoja               |
| 1:1                                                                                                                  |                                                                                        | A1           | 1/1                |
| Este plano es propiedad de NAGARES S.A. y no debe prestarse a terceros sin el consentimiento expreso de NAGARES S.A. |                                                                                        | NAGARES      |                    |