



- **Permanent operation**
Service Permanent
- **Main contact**
Contact principal **3 PST - N0**
- **Auxiliary contact**
Contacts auxiliaires **Up to 4 PDT form C**
Jusqu'à 4 inverseurs
- **Coil supply**
Service Permanent **Direct current**
Courant continu
- **Related standard**
Normes de référence **MIL-PRF-6106P**

PRINCIPAL TECHNICAL CHARACTERISTICS
CARACTERISTIQUES TECHNIQUES PRINCIPALES

- **Contact rated at**
Prévu pour commuter **90 Amps / 28 Vdc**
90 A / 28 Vcc
- **Overall size**
Dimensions hors tout **58,5 x 65,25 x 84,45 mm**
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- **Metal body, thermoplastic cover for dust protection**
Corps métallique, capots thermoplastiques étanches à la poussière
- **Special models available upon request**
Modèles spécifiques sur demande
- **Weight**
Masse **≤ 350g (CA090S-C4N)**
≤ 350g (CA090S-C4N)

GENERAL CHARACTERISTICS
CARACTERISTIQUES GENERALES

Contact rating per load type, main contact Contact principal par type de charge			28 Vcc
Resistive / Résistif Inductive / Inductif [1] Motor / Moteur			90A 60A 60A
Contact rating per load type, auxiliary contact Contact auxiliaire par type de charge		28 Vcc	115 Vac / 400Hz
Resistive / Résistif Inductive / Inductif [1] Minimum current / Courant minimum		5A 2A 2mA	5A 2A 2mA

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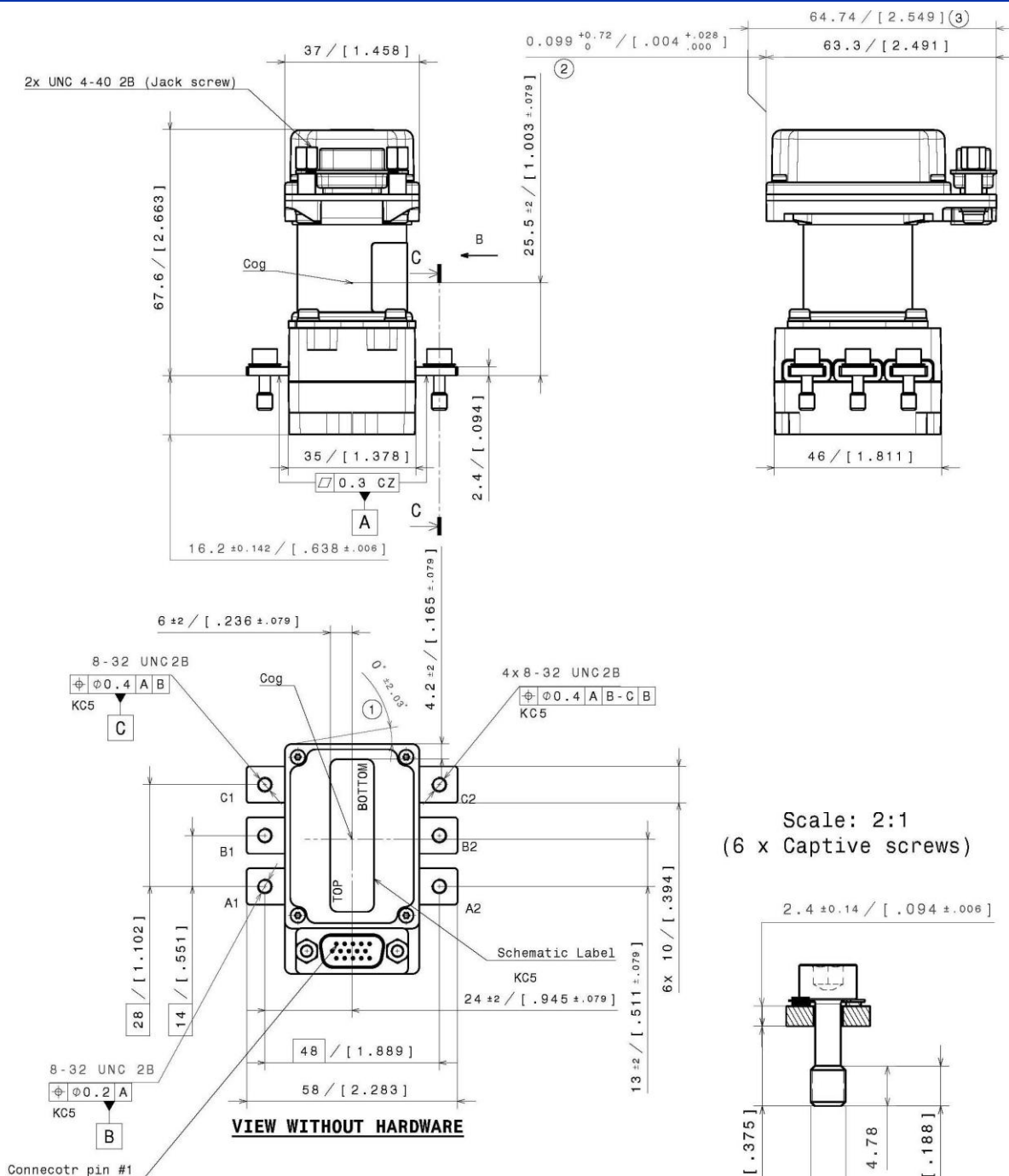
COILS CHARACTERISTICS (Vdc) CARACTERISTIQUES DES BOBINES (Vcc)

Code	N
Nominal voltage Tension nominale	28Vdc
Maximum voltage Tension maximum	32,5Vdc
Maximum pickup voltage Tension max. d'enclenchement assuré	18Vdc
Dropout voltage Tension de déclenchement	TBD 4Vdc max at 25°C.
Inrush current Courant d'appel 25°C	5A max at 28Vcc
Hold current Courant de maintien 25°C	0,21A max at 28Vcc

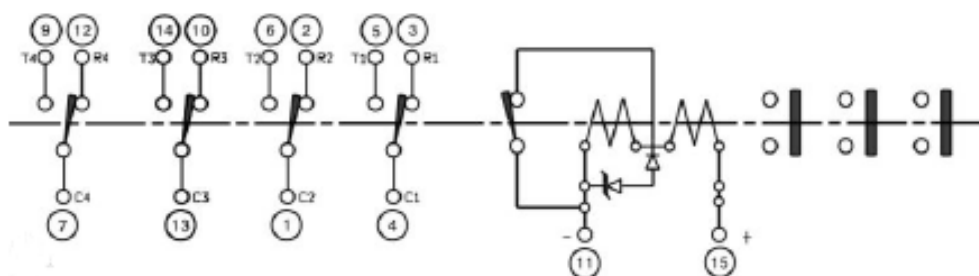
GENERAL CHARACTERISTICS CARACTERISTIQUES GENERALES

Temperature range Gamme de température	-55°C to +85°C
Life at nominal load Durée de vie minimale sous charge nominale	50,000 cycles
Dielectric strength at sea level (main contact) Rigidité diélectrique au niveau de la mer (contact principal)	1800 Vrms
Insulation resistance at 500 Vdc Résistance d'isolement sous 500 Vcc	100 MΩ min.
Sinusoidal vibrations Vibrations sinusoïdales	10G / 10 to 2000Hz
Shocks Chocs	15G / 11ms
Maximum contact opening time under vibrations and shocks Durée maximum d'ouverture des contacts sous l'influence des vibrations et chocs	10 μs
Maximum operate time at 28 Vdc Temps d'enclenchement sous 28 Vcc	10 ms max at 25°C
Maximum dropout time at 28 Vdc Temps de déclenchement sous 28 Vcc	1 ms max at 25°C
Power contact voltage drop Chute de tension, contact principal	
- Initial voltage drop chute de tension initiale	110mVac max
- End of life voltage drop chute de tension finale	150mVac max
Auxiliary contacts Contacts auxiliaires	
- Contact voltage drop initial at 1A Chute de tension de contact initiale sous 1A	105mVdc max
- Contact voltage drop end of life at 1A Chute de tension de contact finale sous 1A	125mVdc max
- Contact resistance initial (at low level) Résistance de contact initiale (bas niveau)	1 Ω max
- Contact resistance end of life (at low level) Résistance de contact finale (bas niveau)	1 Ω max
- Minimum current Courant minimum	2 mA [5]
Coil transient voltage at 28 Vdc Ecrêtage bobine à 28 Vcc	60Vdc max at 25°C [2]
Mounting torque (for C or D style) Couple de serrage (pour fixation de type C ou D)	1.7N.m±10% 40 cN.m +/-10% for the connector

MOUNTING STYLES TYPES DE CONFIGURATION



SCHEMATIC DIAGRAM



REFERENCE SYSTEM SYSTEME DE REFERENCES

CA	090	S	-	A	3	P	-	B	-	001
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Contactor serie:

CA = Contacteur Alternatif

Contactor rating :

Expressed in Amps with 3 digits (050, 400, ...)

Contactor form :

S = Single Throw

D = Double Throw

L = Latch, Double Throw

C = Center-Off

Mounting style (mechanical, electrical, PST, PDT):

A = Mounting holes without barriers

B = Mounting holes with barriers

C = Captive Hardware without barriers

D = Captive Hardware with barriers

E = Stud mounting

Z = For every specific request that cannot be expressed with a standard digit

Terminal & Circuit :

0 to 8 = number of auxiliaries

(default configuration = Form C, MIL-R 6106J)

Coil voltage :

N = 28VDC + coil suppression

I = 28VDC + coil suppression Intermittent

F = 115VAC

P = 28VDC PWM

Z = For every specific request that cannot be expressed with a standard digit

AUX and supply connection

Blank : Standard version = Straight D-SUB on PCB

A : right angle D-SUB on PCB

B : flying lead turn left, standard bundle with a D-SUB

C : flying lead turn right, standard bundle with a D-SUB

Y : For every specific request that cannot be expressed with a standard digit

Add 3 digits (chrono) to express other specific options requested or for a major evolution

PRODUCTS LIST [3] [4]
LISTE DE PRODUITS

	Fixing style Fixation	Auxiliary contacts Contacts auxiliaires	Bobine style Type de bobine	Poids Masse	Notes
CA090S-C4N	C	8	28Vdc + coil suppression	≤ 350 g	/

NOTES
REMARQUES**1. PF=0.7, L/R 5ms***PF0.7, L/R 5ms,***2. Suppressor compatible with lightning test to DO 160C, section 22, level B4K4L4***Ecrêtage compatible avec DO 160C, section 22, niveau B4K4L4.**Before this measurement, the energy supplied by the contactor in the control circuit (unclipped spike) is less than 25 mJ over the entire range of temperature and voltage.***3. Other configurations may be possible. Please contact factory***D'autres configurations peuvent être possibles : Nous consulter.***4. Most standard and recommended part***Série standard la plus recommandée.***5. The use of the auxiliary contacts at low level current is possible only if they have never been previously used at high current level***L'utilisation des contacts auxiliaires en bas niveau n'est possible que s'ils n'ont jamais été utilisés auparavant en haut niveau.*