

TYPE APPROVAL CERTIFICATE**This is to certify:****That the Contactor**

with type designation(s)
LC1-F../LC2-F.. , 2, 3 or 4 poles

Issued to

Schneider Electric Industries SAS
Eybens Isere, France

is found to comply with

DNV GL rules for classification – Ships, offshore units, and high speed and light craft
DNV GL class programme DNVGL-CP-0396 – Type approval – Low-voltage switchgear and
controlgear - rated voltage does not exceed 1000V AC or 1500V DC

Application :

Contactors and reversing / pole-changing contactors for installation in enclosures onboard
ship and mobile offshore units

Product(s) approved by this certificate is/are accepted for installation on all vessels classed
by DNV GL.

Rated Voltage (V) 1000
Rated Current (A) 115 - 780 (at 440 VAC, AC3 Category)
Frequency (Hz) 50 - 60

Issued at **Høvik** on **2017-05-29**

This Certificate is valid until **2022-05-28**.
DNV GL local station: **Le Havre**

Approval Engineer: **Georgy Abramenko**

for **DNV GL**



Digitally Signed By: Andreas Kristoffersen
Location: DNV GL Høvik, Norway
Signing Date: 2017-05-29

Andreas Kristoffersen
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.
The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.



Name and place of manufacturer

Schneider Electric SA
 Cizovska 447
 397 01 Pizek,
 Czech Republic

Product description

Type LC1-F . . contactors for control in utilisation category AC-1 (200 to 1600 A) with 2, 3 or 4 poles or for motor control in utilisation category AC-3 (115 to 780 A) (3-pole).

Type LC2-F . . changeover contactor pairs for control in utilisation category AC-1 (200 to 350 A) (4-pole) or reversing contactors for motor control in utilisation category AC-3 (115 to 265 A) of type: LC2-F.. (3 pole).

Type designation:					I _{th} (AC-1) [A]	I _e (AC-3) [A] (*)
2-pole	3-pole	4-pole	Reversing, 3-pole	Changeover , 4-pole	440 V	440 V
-	LC1-F115	LC1-F1154	LC2-F115	LC2-F1154	200	115
-	LC1-F150	LC1-F1504	LC2-F150	LC2-F1504	250	150
-	LC1-F185	LC1-F1854	LC2-F185	LC2-F1854	275	185
-	LC1-F225	LC1-F2654	LC2-F225	LC2-F2254	315	225
-	LC1-F265	LC1-F2254	LC2-F265	LC2-F2654	350	265
-	LC1-F330	LC1-F3304	-	-	400	330
LC1-F4002	LC1-F400	LC1-F4004	-	-	500	400
LC1-F5002	LC1-F500	LC1-F5004	-	-	700	500
LC1-F6302	LC1-F630	LC1-F6304	-	-	1000	630
-	LC1-F780	LC1-F7804	-	-	1600	780

(*) AC3 ratings apply to 3-pole models only

Auxiliary contact blocks of type:	LA-DN_ _ , LA1-D _ _ , LA2-D _ _ , LA3-D _ _ , LAD-T _ _ , LAD-S _ _ and LAD-R _ _
Accessories for reversers and terminal covers of type:	LA9-F

Application/Limitation

Rated operational voltage, U_e: 1000 V AC max
 Frequency: 50 - 60 Hz
 Current, I_e (AC-3): 115 – 780 A (at 440VAC)

Type Approval documentation

Technical Info:
 Telemecanique brochure no. 25007, 25008 and 25012.

Test reports:
 Schneider Electric:
 CN24992 CB Certificate and associated Test Report
 CN24993 CB Certificate and associated Test Report

Job Id: **262.1-009722-6**
Certificate No: **TAE00001UE**

CN24994 CB Certificate and associated Test Report
CN24995 CB Certificate and associated Test Report
CN24996 CB Certificate and associated Test Report

Telemecanique:
7242 dated 14.03.91.

ASEFA:
17-225 dated 09.04.91, 17-216 dated 22.02.91, 17-217 dated 22.02.91,
17-218 dated 22.02.91, 17.219 dated 22.02.91, 17.223 dated 22.02.91,
17.222 dated 22.02.91, 17-221 dated 22.02.91, 17.220 dated 22.02.91,
17.253 dated 31.01.91, 17.279 dated 31.01.91, 17.283 dated 31.01.91
K11-99-01A dated 08.03.99, K11-99-01B dated 08.03.99, K11-98-32 dated 09.09.98
K11-98-33 dated 09.09.98, K11-98-34 dated 09.09.98, K11-99-03 dated 08.03.99
K11-98-36 dated 09.09.98 K11-98-37 dated 09.09.98, K11-98-38 dated 09.09.98
K11-99-02A dated 19.03.99, K11-99-02B dated 19.03.99, K11-99-04 dated 19.03.99

Tests carried out

Temperature-rise, overload current withstand, making and breaking capacity according to IEC/EN 60947-1 and 60947-4-1.

Marking of product

Manufacturer: Telemecanique and type designation

Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the type approval is complied with and that no alterations are made to the product design or choice of materials.

The main elements of the assessment are:

- Inspection on factory samples, selected at random from the production line (where practicable)
- Results from Routine Tests (RT) checked (if not available tests according to RT to be carried out)
- Review of type approval documentation
- Review of possible change in design, materials and performance
- Ensuring traceability between manufacturer's product type marking and Type Approval Certificate.

Periodical assessment is to be performed after 2 years and after 3,5 years. A renewal assessment will be performed at renewal of the certificate.

END OF CERTIFICATE