DET NORSKE VERITAS

TYPE APPROVAL CERTIFICATE

CERTIFICATE NO. **E-12838**

This is to certify that the
Motor Starter

with type designation(s)
Tesys T

Manufactured by
Schneider Electric Industries SAS
EYBENS, **France**

is found to comply with
Det Norske Veritas' Rules for Classification of Ships, High Speed & Light Craft and Det Norske Veritas' Offshore Standards
IEC 60947

Application
Motor managment control with communication modules for installation in enclosures onboard ship and offshore units.

Rated Voltage (V)	**600 / 690 AC**
Rated Current (A)	**0.4 to 100 (810 w/ external current transformer)**
Frequency (Hz)	**50 - 60**

This Certificate is valid until **2016-06-30**.

Issued at **Høvik** on **2014-02-25**

DNV local station: **Marseille**

Approval Engineer: **Nicolay Horn**

for **Det Norske Veritas AS**
Digitally Signed By: Laumann, Marit
Location: DNV Høvik, Norway
Signing Date: 2014-03-05

Marit Laumann
Head of Section

Name and place of manufacturer

Wuxi Pro-face Electrononics CO.; Ltd
51-A National Hi-Tech Industrial Developing Zone, Wuxi, Jiang Su,
China

Product description

Motor management controller with communication module Modbus or Profilbus DP or DeviceNet or CANOpen or Ethernet.

Technical data:

Controller:

Reference	Operational current		Communication module		Supply voltage	
	Code	Range	Code	Protocol	Code	Input voltage
LTMR	08	0.4 - 8 A	M	Modbus	FM	100 - 240 V AC (50 - 60 Hz)
			P	Profibus DP		
	27	1.35 - 27 A	D	Device Net	BD	24 V DC
			C	CANOpen		
	100	5 - 100 A	E	Ethernet		

Extension module :

No.	Reference	Description	Main characteristics
01	LTMEV40BD	4 Inputs -0 Outputs 24Vdc	Inputs Ui = 24Vdc Uimp = 0.8kV
02	LTMEV40FM	4 Inputs -0 Outputs 100-240Vac	Inputs Ui = 250Vac Uimp = 4kV

Insulation of main circuit (Ui):	600 / 690 V AC*
Rated impulse voltage (Uimp:	6 kV
Frequency:	50 - 60 Hz
Maximum operation voltage Ue):	600 / 690 V AC
Operational current (Ie):	Min. 0.4 A, Max 100 A**
Prospective short circuit current (“r”):	5 kA
Conditional short circuit current (Iq):	80 kA
Ambient temperature range:	- 20 ^{o}C to + 60 ^{o}C
Adjustable trip classes:	5 - 10 - 15 - 20 - 25 - 30

* See Application / limitation
** Up to 810 A when used with external current transformer

Application/Limitation

The Tesys T Motor management controller is regarded as a component only. When the unit is used for control / protection purposes for motors no product certificate is required.

If the unit is used for other control purposes a product certificate acc. to Pt.4 Ch.8 Sec.1 and Pt.4 Ch.9 Sec.1 A 202 can be required. Correct configuration and set up for each delivery to be tested during commissioning after installation.

With Uimp = 6 kV the max. rated voltage is 600 V when used in a IT (ship) net. Applicable for use in applications with directly earthed systems with rated voltage of 400/690 V.

Installation to be in accordance with the manufacturer’s instructions.

Type Approval documentation

Techncal Info :
Schneider document TeSys T : “Motor Management system – Marine Certification file “ dated August 2013.

Test Reports :
LCIE test certificate FR 623519 dated2012-04-20.
“IACS E10 Test reports TeSys T”, Schneider binder dated January 2008.
Asefaand CB Test Reports”, Schneider binder dated April 2012 .

Tests carried out

Dry Heat Test, Damp Heat Test, Low temperature Test, Vibration test and EMC. Type Tests according to IEC60947-4-1.

Marking of product

Telemecanique and / or Schneider Electric - 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 survey are:
- Inspection on factory samples, selected at random from the production line (where practicable)
- Results from Production Sample Tests (PST) and Routines (RT) checked (if not available tests according to PST and 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.

Survey to be performed at least every second year.

END OF CERTIFICATE