

Type Approval Certificate

This is to certify that the undernoted product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.

This certificate is issued to:

PRODUCER Schneider Electric

Yrittäjänkatu 15 65380 Vaasa Finland

DESCRIPTION Protection relay series

TYPES Easergy P3 protection relays

P3 0 - 02345 - 6 A 78 A - 90

Software Version: V. 30.xx

Application

F30 = Feeder

L30 = Feeder with Line differential and distance

M30 = Motor

M32 = Motor with differential

T32 = Transformer protection relay with differential

protection

G30 = Generator

G32 = Generator with differential

① Nominal Supply voltage [V]

C = Power C 110 - 230 V (80 .. 265Vac/dc, 5 x DO heavy duty,

A1, SF)

D = Power D 24 - 48 V (18 .. 60Vdc, 5 x DO heavy duty, A1, SF)

2 I/O Card I

Certificate No. 17/20110

Issue Date 08 November 2017

Expiry Date 07 November 2022

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TYPE (continues) A = None

B = 3BIO+2Arc (3 x BI/BO, 2 x Arc point sensor, T2, T3, T4) C = F2BIO+1Arc (Fibre 2 x BI/BO, 1 x Arc loop sensor, T2, T3,

T4)

 $G = 6DI+4DO (6 \times DI, 4 \times DO)$ $H = 6DI+4DO (6 \times DI, 4 \times DO(NC))$

 $I = 10DI (10 \times DI)$

3 I/O Card II

A = None

 $G = 6DI+4DO (6 \times DI, 4 \times DO)$ $H = 6DI+4DO (6 \times DI, 4 \times DO(NC))$

 $I = 10DI (10 \times DI)$

4 I/O Card III

A = None

 $G = 6DI+4DO (6 \times DI, 4 \times DO)$ $H = 6DI+4DO (6 \times DI, 4 \times DO(NC))$

 $I = 10DI (10 \times DI)$

T = 3xI(5/1A) + Io(5/1A) for Generation differential, excludes I/O card in slot 5

5 I/O Card IV

A = None

 $G = 6DI+4DO (6 \times DI, 4 \times DO)$ H = 6DI+4DO (6 \times DI, 4 \times DO(NC))

 $I = 10DI (10 \times DI)$

© Option card I

A = None

D = 4Arc (4 x Arc sensor)

K = RS232 (RS232)

S = Line differential communication card with distance, for

F application only

T = RS232 with line differential interface

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TYPE (continues)

Future option

A = None

② Analog measurement card (See application)

E = 3L(5A)+4U+2Io(5/1A+1/0.2A)F = 3L(1A)+4U+2Io(5/1A+1/0.2A)

K = 3L(5A)+4U+2Io(5/1A+1/0.2A) with CPU

L = 3L(1A) + 4U + 2Io (5/1A + 1/0.2A) with CPU

® Communication interface I

A = None

B = RS232 (RS232, IRIG-B)

C = RS232+RJ (RS232, IRIG-B + Ethernet RJ-45 100 Mbs)

D = RS232+LC (RS232, IRIG-B + Ethernet LC 100 Mbs)

N = 2xRJ (Ethernet RJ 100 Mbs, RSTP) O = 2xLC (Ethernet LC 100 Mbs, RSTP)

Future option

A = None

Display type

A = 128x64 (128 x 64 LCD matrix) B = 128x128 (128 x 128 LCD matrix)

DI nominal voltage

1 or A = 24V dc/ac 2 or B = 110 V dc/ac

3 or C = 220 V dc/ac

ADDITIONNAL TESTS

Low temperature test: -25°C/16hours

Ingress protection rating: IP54

APPLICATION

Marine and industrial applications for use in environmental categories ENV1, ENV2 and ENV3 as defined in Lloyd's Register's Type Approval

System, Test Specification Number 1 - July 2015.

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STANDARDS Manufacturer's Specification

EN 60255-26: 2014 IEC 60255-26: 2013 EN 60255-27: 2014 IEC 60255-27: 2013

OTHER CONDITIONS

Final functional arrangements are to comply with appropriate Lloyd's Register Rules and Regulations and will be subject of the Plan Approval process on a project tailored basis.

The suitability of the installation is to be demonstrated for each type of switch-, section- and distribution boards, for harmonic filters, motor starter panels, semiconductor converters and transformers, as requested in the relevant paragraph of the Lloyd's Register Rules and Regulations.

An additional short circuit protection is to be provided in form of a hard wired back up System or design diversity unless an LR Software Conformity Assessment has been carried out.

PLACE OF PRODUCTION C

Crimppi Oy Liikekuja 7 65380 Vaasa Finland

The Type Approval does not eliminate the need for normal inspection and survey procedures required by the Rules and Regulations.

If the specified standards are amended during the validity of this certificate, the product is to be re-approved prior to it being supplied to vessels to which the amended standards apply.

The Design Appraisal Document No. HTS/ETS 36072-17 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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