DNV·GL

Certificate No:
TAE00001W5

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Contactor

with type designation(s)
GH15BN / CN / DN / ET / FT / GT /HT / JT / KT / LT / MT / NT / PT / RT / ST / TT
GH55 / 55B / 57 / 57B / 62 / 64 / 76 / 78

Issued to
Ghisalba S.p.A.
RIVOLI TO, Italy

is found to comply with
DNV GL rules for classification – Ships, offshore units, and high speed and light craft

Application :

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

Rated Voltage (V)	**440 - 690**
Rated Current (A)	**7 - 1200**
Frequency (Hz)	**50 / 60**

Issued at **Hamburg** on **2017-04-10**
This Certificate is valid until **2021-12-31**.
DNV GL local station: **Milan**

for **DNV GL**

Approval Engineer: **Harald Amberger**

Duy Nam Le
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.

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Product description

Three pole contactors, without enclosures.

Type	Rated Current (A) Utilization Category AC-3			
	440 V	500 V	690 V	Thermal Current (A)
GH15BN	9	9	7	30
GH15CN	12	12	9	30
GH15DN	16	16	9	40
GH15ET	25	18	13	45
GH15FT	32	24	18	50
GH15GT	40	30	23	63
GH15HT	50	38	26	80
GH15JT	63	45	34	100
GH15KT	80	70	50	115
GH15LT	90	80	60	125
GH15MT	110	90	70	135
GH15NT	150	150	120	230
GH15PT	175	175	140	250
GH15RT	210	210	150	350
GH15ST	260	260	200	450
GH15TT	315	315	240	500
GH55, GH55B	450	450	400	560
GH57, GH57B	550	550	500	650
GH62	700	700	630	750
GH64	860	860	700	900
GH76	1000	1000	860	1100
GH78	1200	1200	1000	1250

Application/Limitation

Marine, offshore and industrial use.

Type Approval documentation

Tests carried out

Type tests according to: IEC 60947-4-1
Other tests: Make and break, insulation, inclination, vibration, dielectric properties, high voltage.

Marking of product

Manufacturer identification, product type and rating.

Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the Type approval are 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