

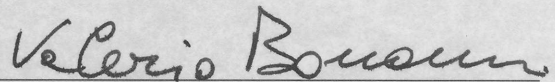


**TYPE APPROVAL CERTIFICATE  
N. ELE038410CS/001**

This is to certify that the product below is found to be in compliance with the applicable requirements of the RINA type approval system.

<i>Description</i>	<b>Manual Motor Starter</b>
<i>Type</i>	<b>GH3RSB; GH3RSBK; GH3RHB; GH3RHBK</b>
<i>Applicant</i>	<b>GHISALBA SpA Via Tevere, 15 10098 Cascine Vica – Rivoli (TO) ITALY</b>
<i>Manufacturer</i>	<b>FUJI ELECTRIC FA COMPONENTS &amp; SYSTEMS Co. LTD 5-45, Minami 1 – chome, Konosu-shi, Saitama-Ken 369-0192 JAPAN</b>
<i>Testing Standards</i>	<b>Rules for Classification of Ships- Part C – Machinery Systems and Fire protection- Ch. 3 Sect. 6 Table 1.</b>

Issued in **Genova** on **April 21, 2011**. This certificate is valid until **April 21, 2016**



RINA

*Valerio Bonanni*

**Genova, April 21, 2011**

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## TYPE APPROVAL CERTIFICATE N. ELE038410CS/001

### Product Description

Manual motor starters type GH3RSB, GH3RSBK, GH3RHB and GH3RHBK and accessories type GHOWI, GHOKI, GHOWU, GHOWKU, GHOTKUAB and GHOF

### Technical Data

- Rated Voltage (Ue) 220Vac to 525 Vac
- Ambient air temperature: 45°
- Rated current (In): 0.16 A up to 32 A.
- Rated Frequency: 50 / 60 Hz
- Utilization Category: A

- *Rated short-circuit capacity:*

Rated service short circuit breaking capacity (Ics)  
Rated ultimate short circuit breaking capacity (Icu)  
Rated short circuit making capacity (Icm)

#### GH3RSB / GH3RSBK

Ue (V)	Ics (kA)	Icu (kA)	Icm (kA)
220 / 260	100 (0.16 to 16 A) 38 (20A to 32 A)	100 (0.16A to 16A) 50 (20A to 32A)	220 (0.16A to 16A) 105 (20A to 32A)
400 / 415	100 (0.16A to 10A) 38 (13A) 19 (16A to 32A)	100 (0.16A to 10A) 50 (13A) 25 (16A to 32A)	220 (0.16A to 10A) 105 (13A) 52.5 (16A to 32A)
460	100 (0.16A to 4A) 38 (6.3A) 11 (10A) 8 (13A to 32A)	100 (0.16A to 4A) 50 (6.3A) 15 (10A) 10 (13A to 32A)	220 (0.16A to 4A) 105 (6.3A) 30 (10A) 17 (13A to 32A)
500 / 525	100 (0.16A to 4A) 38 (6.3A) 8 (10A) 5 (13A to 32A)	100 (0.16A to 4A) 50 (6.3A) 10 (10A) 6 (13A to 32A)	220 (0.16A to 4A) 105 (6.3A) 17 (10A) 9,18 (13A to 32A)

#### GH3RHB / GH3RHBK

Ue (V)	Ics (kA)	Icu (kA)	Icm (kA)
220 / 260	100	100	220
400 / 415	100 (0.16A to 13A) 38 (16A to 32A)	100 (0.16A to 13A) 50 (16A to 32A)	220 (0.16A to 13A) 105 (16A to 32A)
460	100 (0.16A to 6.3A) 38 (10A to 13A) 8 (16A to 32A)	100 (0.16A to 6.3A) 50 (10A to 13A) 10 (16A to 32A)	220 (0.16A to 6.3A) 105 (10A to 13A) 17 (16A to 32A)
500 / 525	100 (0.16A to 4A) 38 (6.3A to 13A) 8 (16A to 32A)	100 (0.16A to 4A) 50 (6.3A to 13A) 10 (16A to 32A)	220 (0.16A to 4A) 105 (6.3A to 13A) 17 (16A to 32A)

### Documents:

POWER CONTROLS Test Report n. LBM91U03.OVI issued on 27.11.2001  
LOVAG Test Report n. L01A-02.01 issued on 31/07/2002  
LOVAG Test Report n. L01A-02.12 issued on 31/10.2002  
EMIT-LAS Test Report n. 0017-PG-01E and n. 0073-PG-02E issued on 10.07.2002.

Genova, April 21, 2011

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