Certificate No:
TAE00004A2

TYPE APPROVAL CERTIFICATE

This is to certify:

That the UPS

with type designation(s)
Galaxy VS 3ph UPS

Issued to
Schneider Electric
Bangalore, India

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.

Issued at **Hamburg** on **2021-05-04**
This Certificate is valid until **2026-05-03**.
DNV local station: **Mumbai NB & CMC**

Approval Engineer: **Maik Gagern**

for **DNV**

Arne Schaarmann
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.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.

Product description

Galaxy VS: Three-phase uninterruptible power supply for general emergency equipment, equipped with battery charger
Battery Type: Valve regulated lead acid

Types of product

Base Model SKU # (Fixed Rating)	UPS Rating	480 V Configuration	380/400/415 V Configuration	Base Model SKU # (Fixed Rating)	200 / 208 / 220 V Configuration
GVSUPS50KD	10 kW	-	-	GVSUPS50KD	GVSUPS10KFS
	15 kW	-	-		GVSUPS15KFS
	20 kW	GVSUPS20KGS	GVSUPS20KHS		GVSUPS20KFS
	25 kW	-	-		GVSUPS25KFS
	30 kW	GVSUPS30KGS	GVSUPS30KHS	GVSUPS100KD	GVSUPS30KFS
	40 kW	GVSUPS40KGS	GVSUPS40KHS		GVSUPS40KFS
	50 kW	GVSUPS50KGS	GVSUPS50KHS		GVSUPS50KFS
GVSUPS100KD	60 kW	GVSUPS60KGS	GVSUPS60KHS	GVSUPS150KD	GVSUPS60KFS
	75 kW	-	-		GVSUPS75KFS
	80 kW	GVSUPS80KGS	GVSUPS80KHS	-	-
	100 kW	GVSUPS100KGS	GVSUPS100KHS	-	-
GVSUPS150KD	120 kW	GVSUPS120KGS	GVSUPS120KHS	-	-
	150 kW	GVSUPS150KGS	GVSUPS150KHS	-	-

Base Model SKU # (Scalable)	UPS Rating	380/400/415/440 V Configuration
GVSUPS50K150D	20 - 150 kW	-
		-
		GVSUPS20KMHS
		-
		GVSUPS30KMHS
		GVSUPS40KMHS
		GVSUPS50KMHS
		GVSUPS60KMHS
		-
		GVSUPS80KMHS
		GVSUPS100KMHS
		GVSUPS120KMHS
		GVSUPS150KMHS

Name of manufacturer and place of production

Schneider Electric IT Business India Private Limited
(Formerly Known as American Power Conversion (I) Pvt. Ltd.)
187/3 & 188/3, Jigani Village,
Jigani Hobil, Anekal Taluk,
Bangalore-562106, India

Application/Limitation

Operation for longer periods in 40-45°C ambient temperature areas requires de-rating of the products nominal load with 2.5%/°C > 40°C.

End user is responsible for correct enclosure protection (IP) with respect to location.

This type approval does not replace the requirement for a product certificate in accordance with the DNV GL Rules RU-SHIP Pt.4, Ch.8, Sec.1, Subclause 2.3 Table 3.

Converters with EMC classed C2 or C3 according to IEC 62040-2 can be installed in "special distribution zone" and "general power distribution zone" in accordance with IEC 60533 provided precautions are taken to attenuate these effects on the distribution system, so the safe operation is assured.
Planned EMC precautions shall be submitted for approval prior to installation on board.

Guidance Note:
The EMC measures should be derived from an EMC analysis and plan in accordance with IEC 60533 Annex B and /or IEC 61800-3 Annex E.
End of Guidance Note

To be installed in climatically controlled areas.

Location classes according to DNVGL-CG-0339:	
Temperature class	A
Vibration class	A
Humidity class	A

Type Approval documentation

Tests carried out

EMC Testing acc. to EN 62040-2: 2006
DNV GL Class Programme DNVGL-CP-0395 “Semiconductor Converters”, Edition 2015 except EMC Testing
Damp heat in accordance with DNV GL Class A (no condensation)

Marking of product

Schneider Electric – Galaxy VS – Technical data

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 periodical assessment 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.

Periodical assessment shall be performed at 2 and 3.5 year and at renewal.

END OF CERTIFICATE