



# TYPE APPROVAL CERTIFICATE

**Certificate No.** : SEL20146-AC001                      **Initial Approval** : 16th May, 2019  
**Product** : Frequency Converter  
**Applicant** : Schneider Electric Korea Co., Ltd.  
189, Seongam-ro, Mapo-gu, Seoul, Korea

**Product Description** : Frequency Converter (Type : Altivar 630/650, 930/950 Series)

\* Manufacturing Place :  
PT SCHNEIDER ELECTRIC MFG BATAM(SEMB)  
BATAM INDUSTRIAL PARK BLK 4 MUKAKUNING BATAM RIAU, 29433, INDONESIA

Schneider Suzhou Drives Co., Ltd.  
No.7 Loujiang East Road, Weiting Town, SIP Suzhou, P.R.China

APC India Pvt Ltd  
187/3 & 188/3, Jigani Village, Jigani Hobli, Bangalore, India.

" See Appendix 1"

**Approval Condition** : " See Appendix 1"

**THIS IS TO CERTIFY** that the above-mentioned product has been approved in accordance with the relevant requirement of this Society's Rules and / or of the recognized standards as follows and entered in the "List of Approved Manufacturers and Type Approved Equipment".

Pt. 6, Ch. 2, Art. 301 of the Rules for Classification, Steel Ships.

This Certificate is valid until 15th May, 2024

Issued at Busan, Korea on 16th May, 2019



This certificate is signed electronically in accordance with IMO FAL.5/Circ.39/Rev.2. Validation and authentication of the certificate can be confirmed from "<http://e-cert.krs.co.kr>" by using the tracking No (ME19011163912) and certificate No.(SEL20146-AC001).



**KOREAN REGISTER OF SHIPPING**

*General Manager of  
Marine & Ocean Equipment Team*

- Note :**
1. This certificate will be valid subject to complying with the approval conditions described on the certificate and/or on the Rules of this Society.
  2. This certificate will be invalid from the expiry date aforementioned unless the extension or renewal has been granted to the applicant or the manufacturer.
  3. Any significant modifications or changes in design or construction to the above product without approval from this Society will render this certificate invalid.
  4. Should the specified rules, regulations or standards be amended during the validity of this certificate, the product is to be re-approved by this Society in accordance with the requirements as amended.

## Appendix 1

# Product Description and/or Approval Condition

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## A. Product Description

### 1. Product Specification

Altivar 630/650, 930/950 Series are variable speed controller for asynchronous motor.

#### 1) Specification

Supply voltage : 200~240 / 380~480 / 575~690 / 50 or 60 Hz  
 Voltage variation : 6 ~ 10% stationary,  $\pm 20\%$  transient  
 Frequency variation :  $\pm 5$  stationary,  $\pm 10\%$  transient  
 Output frequency : 0 ~ 599 Hz

#### 2) Commercial reference for ATV630 standard drive

Range:200~240V 3-phase	Type designation*	Range:380~480V 3-phase	Type designation*
0.75 kW	ATV630U07M3	0.75 kW	ATV630U07N4
1.5 kW	ATV630U15M3	1.5 kW	ATV630U15N4
2.2 kW	ATV630U22M3	2.2 kW	ATV630U22N4
3 kW	ATV630U30M3	3 kW	ATV630U30N4
4 kW	ATV630U40M3	4 kW	ATV630U40N4
-	-	5.5 kW	ATV630U55N4
5.5 kW	ATV630U55M3	7.5 kW	ATV630U75N4
-	-	11 kW	ATV630D11N4
-	-	15 kW	ATV630D15N4
7.5 kW	ATV630U75M3	18.5 kW	ATV630D18N4
11 kW	ATV630U11M3	22 kW	ATV630D22N4
15 kW	ATV630D15M3	30 kW	ATV630D30N4
18.5 kW	ATV630D18M3	37 kW	ATV630D37N4
22 kW	ATV630D22M3	45 kW	ATV630D45N4
30 kW	ATV630D30M3	55 kW	ATV630D55N4
37 kW	ATV630D37M3	75 kW	ATV630D75N4
45 kW	ATV630D45M3	90 kW	ATV630D90N4
55 kW	ATV630D55M3	110 kW	ATV630C11N4
75 kW	ATV630D75M3	132 kW	ATV630C13N4
-	-	160 kW	ATV630C16N4
-	-	220 kW	ATV630C22N4
-	-	250 kW	ATV630C25N4
-	-	315 kW	ATV630C31N4

\* Rerences may be followed by additional characters for options.

#### 3) Commercial reference for ATV650 drive

Range:380~480V 3-phase	Type designation*
0.75 kW	ATV650U07N4
1.5 kW	ATV650U15N4
2.2 kW	ATV650U22N4
3 kW	ATV650U30N4
4 kW	ATV650U40N4
5.5 kW	ATV650U55N4
7.5 kW	ATV650U75N4
11 kW	ATV650D11N4
15 kW	ATV650D15N4
18.5 kW	ATV650D18N4
22 kW	ATV650D22N4
30 kW	ATV650D30N4
37 kW	ATV650D37N4
45 kW	ATV650D45N4
55 kW	ATV650D55N4
75 kW	ATV650D75N4
90 kW	ATV650D90N4

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4) Commercial reference for ATV930 standard drive

Range:200~240V 3-phase	Type designation*	Range:380~480V 3-phase	Type designation*
0.75 kW	ATV930U07M3	0.75 kW	ATV930U07N4
1.5 kW	ATV930U15M3	1.5 kW	ATV930U15N4
2.2 kW	ATV930U22M3	2.2 kW	ATV930U22N4
3 kW	ATV930U30M3	3 kW	ATV930U30N4
4 kW	ATV930U40M3	4 kW	ATV930U40N4
-	-	5.5 kW	ATV930U55N4
5.5 kW	ATV930U55M3	7.5 kW	ATV930U75N4
-	-	11 kW	ATV930D11N4
7.5 kW	ATV930U75M3	15 kW	ATV930D15N4
11 kW	ATV930U11M3	18.5 kW	ATV930D18N4
-	-	22 kW	ATV930D22N4
15 kW	ATV930U15M3	30 kW	ATV930D30N4
18.5 kW	ATV930U18M3	37 kW	ATV930D37N4
22 kW	ATV930U22M3	45 kW	ATV930D45N4
30 kW	ATV930U30M3	55 kW	ATV930D55N4
37 kW	ATV930U37M3	75 kW	ATV930D75N4
45 kW	ATV930U45M3	90 kW	ATV930D90N4
55 kW	ATV930U55M3	110 kW	ATV930C11N4
75 kW	ATV930U75M3	132 kW	ATV930C13N4
-	-	160 kW	ATV930C16N4
-	-	220 kW	ATV930C22N4
-	-	250 kW	ATV930C25N4
-	-	315 kW	ATV930C31N4

5) Commercial reference for ATV950 drive

Range:380~480V 3-phase	Type designation*
0.75 kW	ATV950U07N4
1.5 kW	ATV950U15N4
2.2 kW	ATV950U22N4
3 kW	ATV950U30N4
4 kW	ATV950U40N4
5.5 kW	ATV950U55N4
7.5 kW	ATV950U75N4
11 kW	ATV950D11N4
15 kW	ATV950D15N4
18.5 kW	ATV950D18N4
22 kW	ATV950D22N4
30 kW	ATV950D30N4
37 kW	ATV950D37N4
45 kW	ATV950D45N4
55 kW	ATV950D55N4
75 kW	ATV950D75N4
90 kW	ATV950D90N4

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### 6) Rerences

Range:575~690V 3-phase	Type designation*
2.2 kW	ATV630U22Y6, ATV930U22Y6
3 kW	ATV630U30Y6, ATV930U30Y6
4 kW	ATV630U40Y6, ATV930U40Y6
5.5 kW	ATV630U55Y6, ATV930U55Y6
7.5 kW	ATV630U75Y6, ATV930U75Y6
11 kW	ATV630D11Y6, ATV930D11Y6
15 kW	ATV630D15Y6, ATV930D15Y6
18.5 kW	ATV630D18Y6, ATV930D18Y6
22 kW	ATV630D22Y6, ATV930D22Y6
30 kW	ATV630D30Y6, ATV930D30Y6
37 kW	ATV630D37Y6, ATV930D37Y6
45 kW	ATV630D45Y6, ATV930D45Y6
55 kW	ATV630D55Y6, ATV930D55Y6
75 kW	ATV630D75Y6, ATV930D75Y6
90 kW	ATV630D90Y6, ATV930D90Y6

### 2. Approved Drawings and Documents

- 1) Technical Construction File Part A Rev.9 (2017.12.22), "sti LETTER dnv~"(2017.07.21)

### 3. Test Reports, etc.

- 1) ATV630 CERTIF 17214 IE02(2017.12.01), ATV630 CERTIF 17227 IE02(2017.12.01), LM170008(2017.03.01), ST03423, 154293-718020-A(2018.04.19), 154293-718020-B(2018.04.17), 4787344739(2016.06.10), PB7-4132K(2016.08.11) P174526 - Document DE/5, ATV930\_QTR\_18114 & 18115(2018.04.17), TGM-VA EE 36662 EMC(2016.03.11), TGM-VA EE 36768 EMC(2016.06.09)

## B. Approval Condition

### 1. Application & Limitation

- 1) This approval is granted on the basis of the test reports and approved documentation.
- 2) Degree of protection shall be compiled with Rule Pt.6 Ch.1 Sec.2 201.2.(5).
- 3) The manufacturer should inform this Society of all kinds of revisions of the equipment. If the changes are recognized to affect functionality of the approved equipment, type test to confirm the reliability of the revised equipment may be performed in the presence of our surveyor.

### 2. Individual Product Cert. and Drawing Approval Requirement

- 1) If the converters are used as parts of the motor controller which drive essential auxiliaries specified in KR Rule Pt. 5, Ch. 1, 102 and exceed the output 7.5 kW, Individual Product Certification is required for the motor controller.

### 3. Marking

- 1) The product or packing is to be marked with the manufacturer's name and type designation on a suitable position.

### 4. Others

- 1) Test condition

Test	Condition	Remark
EMC	All locations excluding the bridge and deck zone	-
Temperature	+5 ~ +70°C	-
Vibration	Acceleration ±0.7g	-

< End of Certificate >