TYPE APPROVAL CERTIFICATE

Certificate no.:
TAE00001YE
Revision No:
1

This is to certify:

that the Disconnection Switch

with type designation(s)
Compact INV & INS

issued to
Schneider Electric Industries SAS
Eybens, **France**

is found to comply with

DNV 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 **Høvik** on **2024-10-08**

This Certificate is valid until **2029-10-07**.
DNV local unit: **Marseille**

Approval Engineer: **Qiang William Guo**

for **DNV**
Digitally signed by Elter, Frederik Tore
Location: DNV Høvik, Norway

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.

Place of Manufacturer

Schneider Electric Industries Polska	Schneider (Beijing) Low Voltage Co., Ltd
Sp. z o.o. ul. Mostowa 19 , 32-332 Bukowno, Poland	No.2, Liang Shui He 2nd street Beijing Economic and Technological Development Area Beijing, P.R.China

Product description

Switch disconnectrors type Compact INS and INV as specified in the tables below.

Technical data Compact INS & INV:

Protection class:		IP40
Operational voltage, U_e	(compact INS 40 – INS 80)	500 V
	(compact INS-INV 100 - 630)	690 V
	(compact INS-INV 630b - 2500)	690 V
Insulation voltage, U_i	(compact INS 40 - 80)	690V
	(compact INS-INV 100 - 630)	800 V
	(compact INS-INV 630b - 2500)	1000 V
Rated impulse vithstand voltage, Uimp	(compact INS 40 - 630)	8 kV
	(compact INS 630b - 2500)	12 kV

Current rating, Compact INS:

Type	Utilisation Category	Thermal Current	Operational Rating at	Current Ie operational	Voltage Ue			
			220-240V	380-415V	440-480V	500V	660-690V	125-250V
		Ith	Ie	Ie	Ie	Ie	Ie	Ie DC
INS40	AC22A	40	40	40	40	40	-	-
	AC23A	40	40	40	40	32	-	-
	DC22A	40	-	-	-	-	-	40
	DC23A	40	-	-	-	-	-	40
INS63	AC22A	63	63	63	63	63	-	-
	AC23A	63	63	63	63	40	-	-
	DC22A	63	-	-	-	-	-	63
	DC23A	63	-	-	-	-	-	63
INS80	AC22A	80	80	80	80	80	-	-
	AC23A	80	80	72	63	40	-	-
	DC22A	80	-	-	-	-	-	80
	DC23A	80	-	-	-	-	-	80
INS100	AC22A	100	100	100	100	100	100	-
	AC23A	100	100	100	100	100	63	-
	DC22A	100	-	-	-	-	-	100
	DC23A	100	-	-	-	-	-	100
INS125	AC22A	125	125	125	125	125	125	-
	AC23A	125	125	125	125	125	80	-
	DC22A	125	-	-	-	-	-	125
	DC23A	125	-	-	-	-	-	125
INS160	AC22A	160	160	160	160	160	160	-
	AC23A	160	160	160	160	160	100	-
	DC22A	160	-	-	-	-	-	160
	DC23A	160	-	-	-	-	-	160
INS250	AC22A	100-250	100-250	100-250	100-250	100-250	100-250	-
	AC23A	100-250	100-250	100-250	100-250	100-250	100-250	-
	DC22A	100-250	-	-	-	-	-	100-250
	DC23A	100-250	-	-	-	-	-	100-250
INS320	AC22A	320	320	320	320	320	320	-
	AC23A	320	320	320	320	320	320	-
	DC22A	320	-	-	-	-	-	320
	DC23A	320	-	-	-	-	-	320
INS400	AC22A	400	400	400	400	400	400	-
	AC23A	400	400	400	400	400	400	-
	DC22A	400	-	-	-	-	-	400

Type	Utilisation Category	Thermal Current	Operational Rating at	Current Ie operational	Voltage Ue			
			220-240V	380-415V	440-480V	500V	660-690V	125-250V
		Ith	Ie	Ie	Ie	Ie	Ie	Ie DC
	DC23A	400	-	-	-	-	-	400
INS500	AC22A	500	500	500	500	500	500	-
	AC23A	500	500	500	500	500	500	-
	DC22A	500	-	-	-	-	-	500
	DC23A	500	-	-	-	-	-	500
INS630	AC22A	630	630	630	630	630	630	-
	AC23A	630	630	630	630	630	630	-
	DC22A	550	-	-	-		-	550
	DC23A	550	-	-	-		-	550
	DC23B	550						630
INS630b	AC21A	630	630	630	630	630	630	-
	AC22A	630	630	630	630	630	630	-
	AC23A	630	630	630	630	630	630	-
	DC21A	630	-	-	-	-	-	630
	DC22A	630	-	-	-	-	-	630
	DC23A	630	-	-	-	-	-	630
INS800	AC21A	800	800	800	800	800	800	-
	AC22A	800	800	800	800	800	800	-
	AC23A	800	800	800	800	800	800	-
	DC21A	800	-	-	-	-	-	800
	DC22A	800	-	-	-	-	-	800
	DC23A	800	-	-	-	-	-	800
INS1000	AC21A	1000	1000	1000	1000	1000	1000	-
	AC22A	1000	1000	1000	1000	1000	1000	-
	AC23A	1000	1000	1000	1000	1000	1000	-
	DC21A	1000	-	-	-	-	-	1000
	DC22A	1000	-	-	-	-	-	1000
	DC23A	1000	-	-	-	-	-	1000
INS1250	AC21A	1250	1250	1250	1250	1250	1250	-
	AC22A	1250	1250	1250	1250	1250	1250	-
	AC23A	1250	1250	1250	1250	1250	1250	-
	DC21A	1250	-	-	-	-	-	1250
	DC22A	1250	-	-	-	-	-	1250
	DC23A	1250	-	-	-	-	-	1250
INS1600	AC21B/A	1600	1600/1450	1600/1450	1600/ 1250	1600/ 1250	1600/1250	-
	AC22B/A	1600	1600/1450	1600/1450	1600/ 1250	1600/ 1250	1600/1250	-
	AC23A	1600	1250	1250	1250	1250	1250	-
	DC21A	1600	-	-	-	-	-	1600
	DC22A	1600	-	-	-	-	-	1600
	DC23A	1600	-	-	-	-	-	1600
INS2000	AC21B	2000	2000	2000	2000	2000	2000	-
	AC22B	2000	2000	2000	2000	2000	2000	-
	AC23B	2000	-	-	-	-	-	-
	DC21B	2000	-	-	-	-	-	2000
	DC22B	2000	-	-	-	-	-	2000
	DC23B	2000	-	-	-	-	-	-
INS2500	AC21B	2500	2500	2500	2500	2500	2500	-
	AC22B	2500	2500	2500	2500	2500	2500	-
	AC23B	2000	-	-	-	-	-	-
	DC21B	2500	-	-	-		-	2500
	DC22B	2500	-	-	-		-	2500
	DC23B	2000	-	-	-	-	-	-

Current rating, INV:

Type	Utilisation Category	Thermal Current	Operational Rating at	Current Ie operational	Voltage Ue			
			220-240V	380-415V	440-480V	500-525V	660-690V	125-250V
		Ith	Ie	Ie	Ie	Ie	Ie	Ie DC
INV100	AC21A	100	100	100	100	100	100	-
	AC22A	100	100	100	100	100	100	-
	AC23A	100	100	100	100	100	100	-
	DC21A	100	-	-	-	-	-	100
	DC22A	100	-	-	-	-	-	100
	DC23B	100	-	-	-	-	-	100
INV160	AC21A	160	160	160	160	160	160	-
	AC22A	160	160	160	160	160	160	-
	AC23A	160	160	160	160	160	160	-
	DC21A	160	-	-	-	-	-	160
	DC22A	160	-	-	-	-	-	160
	DC23B	160	-	-	-	-	-	160
INV200	AC21A	200	200	200	200	200	200	-
	AC22A	200	200	200	200	200	200	-
	AC23A	200	200	200	200	200	200	-
	DC21A	200	-	-	-	-	-	200
	DC22A	200	-	-	-	-	-	200
	DC23B	200	-	-	-	-	-	200
INV250	AC21A	250	250	250	250	250	250	-
	AC22A	250	250	250	250	250	250	-
	AC23A	250	250	250	250	250	250	-
	DC21A	250	-	-	-	-	-	250
	DC22A	250	-	-	-	-	-	250
	DC23B	250	-	-	-	-	-	250
INV320	AC21A	320	320	320	320	320	320	-
	AC22A	320	320	320	320	320	320	-
	AC23A	320	320	320	320	320	320	-
	DC21A	320	-	-	-	-	-	320
	DC22A	320	-	-	-	-	-	320
	DC23B	320	-	-	-	-	-	320
INV400	AC21A	400	400	400	400	400	400	-
	AC22A	400	400	400	400	400	400	-
	AC23A	400	400	400	400	400	400	-
	DC21A	400	-	-	-	-	-	400
	DC22A	400	-	-	-	-	-	400
	DC23B	400	-	-	-	-	-	400
INV500	AC21A	500	500	500	500	500	500	-
	AC22A	500	500	500	500	500	500	-
	AC23A	500	500	500	500	500	500	-
	DC21A	500	-	-	-	-	-	500
	DC22A	500	-	-	-	-	-	500
	DC23B	500	-	-	-	-	-	500
INV630	AC21A	630	630	630	630	630	630	-
	AC22A	630	630	630	630	630	550	-
	AC23A/B	630	630/630	630/630	630/630	500/630	500/630	-
	DC21A	550	-	-	-	-	-	550
	DC22A	550	-	-	-	-	-	550
	DC23A/B	550	-	-	-	-	-	550/630
INV630b	AC21A	630	630	630	630	630	630	-
	AC22A	630	630	630	630	630	630	-
	AC23A	630	630	630	630	630	630	-
	DC21A	630	-	-	-	-	-	630
	DC22A	630	-	-	-	-	-	630
	DC23B	630	-	-	-	-	-	630
INV800	AC21A	800	800	800	800	800	800	-

Type	Utilisation Category	Thermal Current	Operational Rating at	Current Ie operational	Voltage Ue			
			220-240V	380-415V	440-480V	500-525V	660-690V	125-250V
		Ith	Ie	Ie	Ie	Ie	Ie	Ie DC
	AC22A	800	800	800	800	800	800	-
	AC23A	800	800	800	800	800	800	-
	DC21A	800	-	-	-	-	-	800
	DC22A	800	-	-	-	-	-	800
	DC23B	800	-	-	-	-	-	800
INV1000	AC21A	1000	1000	1000	1000	1000	1000	-
	AC22A	1000	1000	1000	1000	1000	1000	-
	AC23A	1000	1000	1000	1000	1000	1000	-
	DC21A	1000	-	-	-	-	-	1000
	DC22A	1000	-	-	-	-	-	1000
	DC23B	1000	-	-	-		-	1000
INV1250	AC21A	1250	1250	1250	1250	1250	1250	-
	AC22A	1250	1250	1250	1250	1250	1250	-
	AC23A	1250	1250	1250	1250	1250	1250	-
	DC21A	1250	-	-	-	-	-	1250
	DC22A	1250	-	-	-	-	-	1250
	DC23B	1250	-	-	-	-	-	1250
INV1600	AC21B/A	1600	1600/1450	1600/1450	1600/1250	1600/1250	1600/1250	-
	AC22B/A	1600	1600/1450	1600/1450	1600/1250	1600/1250	1600/1250	-
	AC23A	1600	1250	1250	1250	1250	1250	-
	DC21A	1600	-	-	-	-	-	1600
	DC22A	1600	-	-	-	-	-	1600
	DC23A	1600	-	-	-	-	-	1600
INV2000	AC21B	2000	2000	2000	2000	2000	2000	-
	AC22B	2000	2000	2000	2000	2000	2000	-
	AC23B	2000	-	-	-	-	-	-
	DC21B	2000	-	-	-	-	-	2000
	DC22B	2000	-	-	-	-	-	2000
	DC23B	2000	-	-	-	-	-	-
INV2500	AC21B	2500	2500	2500	2500	2500	2500	-
	AC22B	2500	2500	2500	2500	2500	2500	-
	AC23B	2500	-	-	-	-	-	-
	DC21B	2500	-	-	-	-	-	2500
	DC22B	2500	-	-	-	-	-	2500
	DC23B	2500	-	-	-	-	-	-

Application/Limitation

Switch disconnectors for installation inside switchboards / enclosures onboard ships and mobile offshore units.

Type Approval documentation

Schneider Electric Catalogue 2007 Interpact INS/INV 40 a 2500 A (parts)	2015-06
Schneider test report no. CLIM980004	1998-01-23
Schneider test report no. G9804026	1998-03-30
CB certificate NL31483	2014-06-16
CB certificate NL31484	2014-06-16
CB certificate NL31485	2014-06-16
CB certificate NL31486	2014-06-16
CB certificate NL31487	2014-06-16
CB certificate NL31488	2014-06-16
CB certificate NL31489	2014-06-16
CB certificate NL31490	2014-06-16
CB certificate NL31491	2014-06-16
Cb certificate NL31576	2014-08-06
2171689.51_CBTR_F_INS630	2014-04-16

2171689.50_CBTR_F_INS250	2014-06-16
2171689.52_CBTR_F_INS80	2014-06-16
2171689.53_CBTR_F_INV250	2014-06-16
2171689.54_CBTR_F_INV630	2014-06-16
2171689.55_CBTR_F_INS1600	2014-06-16
2171689.56_CBTR_F_INS2500	2014-06-16
2171689.57_CBTR_F_INV1600	2014-06-16
2171689.58_CBTR_F_INV2500	2014-06-16
2171689.59_CBTR_F_INS100-125-160	2014-08-16
RI-201504588-001-EN-INS1600-CLIM=S=C2-03-11-2015	2015-03-11

Tests carried out

Type tests in accordance to IEC 60947-3/ 2012. Environmental tests (Vibration, damp heat and salt mist in accordance with IEC60068-2-11).

Marking of product

Schneider Electric - Type designation - Rated voltage - Rated current

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