

TYPE TEST CERTIFICATE

COMPLETE TYPE TESTS

No **B25-21-AV-01E_SDDSV1-CERT**

Applicant

Contactum Ltd

2 Blackmoor Lane. Croxley Green Business Park, Watford
London WD18 8GA. United Kingdom

Manufacturer

Alfanar Electrical Systems

Madinet alfanar, 3rd Industrial City
P.O. Box 564. Riyadh 11383. Saudi Arabia

Product

Consumer Units SDDS Defender 2.0

Designation: Contactum Defender 2.0

Main ratings: Rated Current: 100 A
Rated Insulation Voltage: 400 V
Rated Operation Voltage: 230 V
Rated Frequency: 50 Hz
Rated Impulse Voltage: 4 kV

Standard

Fulfills the type-test requirements of:

BS EN 61439-3:2012 Edition 1.0

Clauses 10.2.2 - 10.2.3.1 - 10.2.3.2 - 10.2.6 - 10.2.7 - 10.3 - 10.4 - 10.5.2 -
10.5.3 - 10.6 - 10.7 - 10.8 - 10.9.2 - 10.9.3 - 10.10 - 10.11 - Annex ZB 16 kA
with Fuse - 10.12 - 10.13

Test results are described in the following documents:

Type test report No: **B25-21-AV-01E_SDDSV1**

Certificate issued on

6th September 2021

Electronic signature

Luis Martínez Cancela
Head of Electrical Equipment Laboratory



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BS-EN 61439-3 Clauses	Clause Description	Tested ratings
10.2.2	Resistance to corrosion	Severity A. Indoor
10.2.3.1	Verification of thermal stability of enclosures	NA, metallic enclosure
10.2.3.2	Verification of the resistance of insulating materials to abnormal heat and fire due to internal electric effects	960°C for insulating materials supporting live elements 650°C for insulating materials not supporting live elements
10.2.6	Mechanical impact	IK05
10.2.7	Marking	NA for indoor use
10.3	Degree of protection of assembly	IP4X (only for the top) IP2XC
10.4	Clearances and creepage distances	Clearance > 3 mm (Uimp=4kV) Creepage distances > 4 mm (Ui=400V) Pollution degree 2, material group IIIa
10.5.2	Effective earth continuity between the exposed conductive parts of the assembly and the protective circuit	Resistance < 0.1 Ω
10.5.3	Short-circuit withstand strength of the protective circuit	Icc 6 kA at 230 V
10.6	Incorporation of switching devices and components	as per standard
10.7	Internal electrical circuits and connectors	as per standard
10.8	Terminals for external conductors	as per standard
10.9.2	Power-frequency withstand voltage	Utest 1890V for Ui=400V
10.9.3	Impulse withstand voltage	Utest 4.8kV for Uimp=4kV
10.10	Verification of the complete assembly	Incoming Unit: 100 A Outgoing Units: 3.6, 6.4, 10, 18, 24, 38 A Rated diversity factor 1
10.11	Short-circuit withstand strength	Icw 10kA, 0.1s (comb busbar) Icc 6kA at 230V (neutral busbar) Icc 6kA at 230V (incoming busbar) Icc 6kA and 10 kA at 230V (outgoings)
Annex ZB	16 kA test with Fuse	16kA at 230V
10.12	Electromagnetic compatibility (EMC)	NA; no electronic circuits
10.13	Mechanical operation	50 operations



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Extension of qualification **SDDS Range with Cat Nos:**

S#	Cat#
151	SDDS06111AMS
152	SDDS06111AMS-P01
153	SDDS06111ASPMS
154	SDDS06111ASPMS-P01
155	SDDS06166AMS
156	SDDS06166AMS-P01
157	SDDS06166ASPMS
158	SDDS06166ASPMS-P01
159	SDDS08111AMS
160	SDDS08111AMS-P01
161	SDDS08111ASPMS
162	SDDS08111ASPMS-P01
163	SDDS08166AMS
164	SDDS08166AMS-P01
165	SDDS08166ASPMS
166	SDDS08166ASPMS-P01
167	SDDS10111AMS
168	SDDS10111AMS-P01
169	SDDS10111ASPMS
170	SDDS10166ASPMS
171	SDDS10111ASPMS-P01
172	SDDS10166ASPMS-P01
173	SDDS10166AMS
174	SDDS10166AMS-P01
175	SDDS12111AMS
176	SDDS12111AMS-P01

S#	Cat#
177	SDDS12111ASPMS
178	SDDS12111ASPMS-P01
179	SDDS12166AMS
180	SDDS12166AMS-P01
181	SDDS12166ASPMS
182	SDDS12166ASPMS-P01
183	SDDS14111AMS
184	SDDS14111AMS-P01
185	SDDS14111ASPMS
186	SDDS14111ASPMS-P01
187	SDDS14166AMS
188	SDDS14166AMS-P01
189	SDDS14166ASPMS
190	SDDS14166ASPMS-P01
191	SDDS16111AMS
192	SDDS16111AMS-P01
193	SDDS16111ASPMS
194	SDDS16111ASPMS-P01
195	SDDS16166AMS
196	SDDS16166AMS-P01
197	SDDS16166ASPMS
198	SDDS16166ASPMS-P01
199	SDDS18111AMS
200	SDDS18111AMS-P01
201	SDDS38111AMS
202	SDDS38111ASPMS



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