



# Defender Consumer Units

A comprehensive range of single phase consumer units Compliant with BS7671 18th Edition Wiring Regulations Tested in accordance to BS EN 61439-3



Established in 1936, Contactum is a proud British brand with a distinguished heritage in the electrical industry. For nearly a century, we have been a trusted name in the supply of wiring accessories, circuit protection devices, and control products across residential, commercial, and industrial sectors.

Our reputation has been built on a foundation of quality, safety, and a design-led approach, with a focus on delivering products that meet the unique demands of the UK market. Offering the latest solution-led wiring accessories to award-winning consumer units and commercial switchgear, Contactum delivers reliable, specification-grade electrical solutions designed to meet the evolving needs of electricians, contractors, wholesalers, and specifiers.

We pride ourselves on combining performance, compliance, and visual appeal across our ranges, supported by robust technical expertise and responsive customer service.



To support our commitment to excellence, Contactum operates an ISO Integrated Management System, covering quality (ISO 9001), environmental (ISO 14001), and occupational health & safety (ISO 45001) standards. This ensures that every aspect of our operations – from product development to customer service – is underpinned by internationally recognised best practices.

Further reinforcing our dedication to sustainability and corporate responsibility, Contactum has recently been awarded a medal-level rating by Eco Vadis, a leading global assessment platform for environmental, social, and ethical performance.

## alfanar

As part of the alfanar group, Contactum benefits from the backing of a global leader in electrical manufacturing, energy, and infrastructure. Headquartered in Riyadh, Saudi Arabia, alfanar brings world-class scale, engineering excellence, and advanced production capabilities to the partnership.

A large proportion of Contactum's product offering is manufactured at alfanar Industrial City — a cutting-edge 700,000 square metre facility in Riyadh. This ISO-certified complex is equipped with automated production lines, quality testing laboratories, and R&D centres, staffed by skilled professionals committed to delivering consistent quality and innovation across all markets. This achievement highlights our continuous efforts to operate transparently, reduce environmental impact, and promote responsible business practices throughout our supply chain.





By combining the local insight and agility of a UK-based brand with the scale, resources, and innovation of a global manufacturing group, Contactum remains uniquely positioned to serve the needs of the modern electrical market. Whether supporting new build developments, refurbishment projects, or infrastructure upgrades, Contactum continues to deliver dependable solutions trusted by professionals across the UK and beyond.

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## 18th Edition

When AMD2 of the 18<sup>th</sup> Edition of the wiring regulations was released in 2022, significant changes were implemented that impacted the decisions made by manufacturers, designers and installers of consumer units and incorporated circuit protection devices.

#### (421.1.7) Arc Fault Detection

As a means of providing additional protection against fire caused by arc faults in AC final circuits, Arc Fault Detection Devices conforming to IEC/BS EN 62606 are required in certain circumstances and recommended in others. Contactum have introduced a range to support contractors in meeting these obligations.

#### (443.4) Overvoltage (Surge) Protection

Although not a new addition to the wiring regulations, an emphasis has been put on the merits of installing SPDs and now these devices are becoming a standard inclusion within Consumer Units. Protection against transient overvoltages shall be provided where the consequence caused by the overvoltage could result in serious injury to, or loss of human life and significant financial or data loss.

For all other cases, protection against transient overvoltages shall be provided unless the owner of the installation declares it is not required due to any loss or damage being tolerable and they accept the risk of damage to equipment and any consequential loss.

#### (531.3.3) RCD Selection

Depending on their behaviour in the presence of DC components and frequencies, an appropriate RCD shall be selected from the different types of RCDs that exist. With the growing number of electronic devices in the home, Type A RCDs are now seen as the general standard and Contactum provide Type A as standard on all RCCBs and RCBOs.

#### (536.4.3.2) Overload Protection of RCCBs & Switches

Devices of this nature do not normally provide protection against overload. These devices shall now be protected by an appropriately rated overcurrent protective device upstream of the RCCB or switch and be installed according to the manufacturers instructions.

Overload protection of the switch or RCCB can now not be solely based on the use of diversity factors of the downstream circuits. Contactum provides clear InA ratings for every Consumer Unit and advise that this rating must not exceed the upstream OCPD rating.

## BS7671:2018 AMD3:2024

An amendment to the wiring regulations (AMD3) was introduced on the 31st July 2024. This amendment provides for the inclusion of two new definitions and one new regulation relating to the use of bidirectional and unidirectional circuit protection devices.

#### **Definitions:**

+ Bidirectional Protective Device

A protective device where it is intended by the manufacturer that a source of supply is connected to either or both sets of connection terminals

#### + Unidirectional Protective Device

A protective device designed by the manufacturer to allow a power source to be connected only to a specific set of connection terminals.

#### Regulation 530.3.201

Selection and erection of equipment for protection shall take account of appropriate use of either a unidirectional protective device or a bidirectional device.

Product standards (as listed in appendix 1) for some protective devices, including RCCBs, RCBOs, circuit breakers and AFDDs, require these devices to be marked to indicate if they are unidirectional e.g. "in" and "out" or "Line" and "Load" arrows.

## **Contactum Design Service for Circuit Protection**

## Our bespoke design service for factory-assembled units ensures a customised solution tailored to your project's needs.

#### **Tailored Circuit Protection Solutions**

Our expert team will help you design the optimal configuration for your project.

Using both standard and non-standard Contactum devices and accessories, we supply fully assembled units ready for immediate installation.

If your project requires fully customised solutions or pre-fitted outgoing devices, our service offers:

- + Reduced on-site labour time
- + Seamless project continuity
- + Enhanced efficiency and reliability

#### How it Works:

- 1. Contact our dedicated contractor sales team via the email below.
- Discuss your requirements, agree on a design configuration, and confirm quantities. (Minimum order quantities apply)
- 3. Receive a tailored quotation based on your exact needs.
- 4. Place an order through one of our selected distributor partners.
- 5. We assemble and dispatch your boards—fully configured and ready for installation.

#### Contact our Customer Service Team:

Telephone: 0208 208 7419

Email the contractors sales team: contractors@contactum.co.uk

## Why Choose Our Design Service?

Our design service is ideal for all project applications, ensuring compliance, continuity, and peace of mind. We collaborate closely with M&E Consultants, Electrical Contractors, and Housing Developers to deliver efficient and seamless solutions.



- + Dedicated contractor sales team
- + Fast turnaround from enquiry to delivery
- + Reduced on-site labour costs
- + Minimised waste from packaging
- + No loose products on-site
- + Correctly configured boards for faster installation
- + Available for all circuit protection ranges



## Choosing the Right Solution Without Compromise

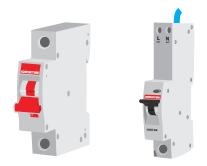
At Contactum, we understand that different installations have different demands.

That's why we offer two distinct consumer unit solutions:

#### Defender 1.0 and Defender 2.0

Each designed to meet specific needs while maintaining superior quality, compliance, and safety.

Both designs are supported with a full range 6kA circuit protection devices including:MCB'sB or C curveRCBO'sSingle Pole or Switched Neutral with Bi-Directional power flow compatibilityAFDD'sMCB or RCBO functionality



# Defender 1.0 Consumer Unit

#### Affordable Reliability Without Compromise

The Defender 1.0 consumer unit is engineered to provide a cost-effective solution while ensuring uncompromised quality, safety, and compliance. Developed to offer exceptional value, it delivers everything needed for a reliable installation without unnecessary extras.

- + Superior Construction: Built with high-quality materials for durability and longevity.
- + Fully Compliant: Meets BS EN 61439-3 and BS7671 standards for guaranteed safety.
- + Essential Features: Designed for straightforward installations with all the fundamental protections required.
- + Value for Money: A practical and cost effective choice without sacrificing performance.



#### Perfect for:

- + Standard residential installations
- + Cost-conscious projects requiring compliance and quality
- + Installers looking for a no-fuss, reliable consumer unit

#### Which One is Right for You?

Whether you need a cost-effective, compliant solution (Defender 1.0) or a premium, feature-rich consumer unit designed for modern living (Defender 2.0), we have the perfect fit for your project. **Turn to page 11 to discover Defender 2.0 in detail.** 

Both Defender 1.0 and Defender 2.0 are built to last, protect, and perform-the choice comes down to your project's specific needs.

#### Some of the most important aspects are featured here:

All Defender 1.0 Consumer Units are packed with enhanced features and benefits.

- Tested by reputed third party in accordance with BS EN 61439-3: 2012 including Annex ZB
- + Up to 100A (InA) rated
- + Type A RCDs and RCBOs as standard
- + Stackable enclosures



## Features



## External Features



- + Comprehensive range Comprising 10 different enclosures sizes
- + Modern sleek design Suitable for all installations
- + Degree of protection IP4X

#### **Internal Features**

- + Maximum cable space Extensive number of cable entry points allowing easy installation
- + Flexible Board Configuration To enable optimal combination of RCD, MCB and RCBO use
- + Up to 22 module board as standard Combine boards to increase number of outgoing ways
- + Pre-populated Configurations Available
- + Full metal din rail For secure device fixing

# Defender 1.0

## Switch Disconnect Incomer Consumer Units Without & With Surge Protection

2 Way: 63A CU ISO Incomer 4 - 20 Way: 100A CU ISO Incomer



	Stand Alone SPD Enclosure
Size:	Product Code:
0 Way	DD006SPMS



	100A Rating	
	Without SPD	With SPD
Size:	Product Code:	Product Code:
4 Way	DD041MS	DD041SPMS
6 Way	DD061MS	
8 Way		DD081SPMS
10 Way	DD101MS	DD101SPMS
12 Way	DD121MS	DD121SPMS
14 Way	DD141MS	DD141SPMS
16 Way	DD161MS	DD161SPMS
18 Way	DD181MS	DD181SPMS
20 Way	DD201MS	
Populated		
10 Way Switch + 6 eRCB0		
+ 4 Blanks		DD101SPMS-P01

## **RCD** Incomer Consumer Units

4 - 20 Way: 80A CU ISO Incomer + 1 RCD Type A



	80A Rating
Size:	Product Code:
4 Way	DR048AMS
6 Way	DR068AMS
10 Way	DR108AMS
14 Way	DR148AMS
16 Way	DR168AMS
20 Way	DR208AMS

Ι



#### Split Load Consumer Units

8 - 18 Way: 80A CU ISO Incomer

+ 1 RCD Type A



	80A Rating
Size:	Product Code:
8 Way	DS0818AMS
10 Way	DS1018AMS
12 Way	DS1218AMS
14 Way	DS1418AMS
18 Way	DS1818AMS

## Flexible High Integrity Split Load Dual RCD Consumer Units Without & With Surge Protection

6 - 16 Way: 80A CU ISO Incomer + 2 RCD Type A



	80A Rating	
	Without SPD	With SPD
Size:	Product Code:	
6 Way	DDS06188AMS	DDS06188ASPMS
8 Way	DDS08188AMS	DDS08188ASPMS
10 Way	DDS10188AMS	DDS10188ASPMS
12 Way	DDS12188AMS	DDS12188ASPMS
14 Way	DDS14188AMS	DDS14188ASPMS
16 Way	DDS16188AMS	
Populated		
6 Way c/w + 6 MCBs	DDS06188AMS-P01	
8 Way c/w + 8 MCBs	DDS08188AMS-P01	
10 Way c/w + 10 MCBs	DDS10188AMS-P01	DDS10188ASPMS-P01
12 Way c/w + 10 MCBs	DDS12188AMS-P01	DDS12188ASPMS-P01
14 Way c/w + 10 MCBs	DDS14188AMS-P01	DDS14188ASPMS-P01

DDS16188AMS-P01

Other populated configurations available on request

16 Way c/w + 10 MCBs



#### **Empty Enclosures**

4 - 22 Mod: IP4X Mod Metal Encl c/w Earth/ Neutral



#### DME02MS 2 Mod 4 Mod DME04MS 6 Mod DME06MS 8 Mod DME08MS DME012MS 12 Mod 14 Mod DME014MS 16 Mod DME016MS 18 Mod DME018MS 20 Mod DME020MS DME022MS 22 Mod

**Product Code:** 

Size:

#### Garage Unit & Shower Enclosures

**2 Way:** 63A CU RCD Type A Incomer

Garage Unit: 63A RCD Type A + 16A MCB + 6A MCB



Size:	Product Code:
2 Way 63A	DR026AMS
Populated	l i i i i i i i i i i i i i i i i i i i
Garage Unit 63A	DR026AMS-P01
Shower Enc 0 Way 40A	DSPE1AMS
Shower Enc 1 Way 50A	DSPE2AMS
Shower Enc 2 Way 63A	DSPE3AMS

Other populated configurations available on request

#### Shower Enclosures:

0 O/G Way 40A RCBO Type A

1 O/G Way 63A RCD Type A + 50A MCB

2 O/G Way 63A RCD Type A + 32A MCB + 16A MCB

## Rear Cable Top Entry Bracket

**12 - 22 Mod:** Rear Cable Top Entry Bracket

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Size:	Product Code:
12 Mod	RCEB-TE-12MOD
14 Mod	RCEB-TE-14MOD
16 Mod	RCEB-TE-16MOD
18 Mod	RCEB-TE-18MOD
20 Mod	RCEB-TE-20MOD
22 Mod	RCEB-TE-22MOD

## Technical Data for Defender 1.0:

Standard	BS EN 61439-3: 2012 Including Annex ZB (16kA)
Max Current Rating (InA) *	100A
Rated Operating Voltage (Ue)	230V AC 50Hz
Short Circuit Withstand (Icw)	10kA 0.1 sec
Poles	1
Cable Entry/Exit (KO's)	20, 25 & 32mm
Material	1.2mm Sheet Steel
IP Protection Rating	IP2XC/IP4X

Impact Rating	IK05	
RAL Colour	9016	
Fixing	Surface	
Terminal Torque (N.m)	1.5	
Module Width	17.8mm	

Please see product description for individual enclosure InA rating as each Consumer Unit differs. The upstream over current protection device must not exceed the enclosure InA rating.

## Choosing the Right Solution Without Compromise

At Contactum, we understand that different installations have different demands.

That's why we offer two distinct consumer unit solutions:

#### Defender 1.0 and Defender 2.0

Each designed to meet specific needs while maintaining superior quality, compliance, and safety.

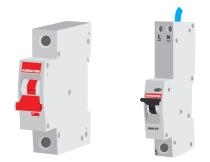
Both des	igns are supported with a full range 6kA circuit protection devices including:
MCB's	B or C curve
RCBO's	Single Pole or Switched Neutral with Bi-Directional power flow compatibility
AFDD's	MCB or RCBO functionality

# Defender 2.0 Consumer Unit

## Designed for Modern Living & Effortless Installation

Building upon the robust foundation of the Defender 1.0, the Defender 2.0 consumer unit introduces an enhanced experience tailored for both the installer and end user. Thoughtfully designed with modern aesthetics, convenience, and innovation in mind, Defender 2.0 is the premium choice for contemporary electrical installations

- + Installer-Friendly Features: Time-saving innovations make installation smoother and faster.
- + Enhanced Safety & Compliance: Fully meets BS EN 61439-3 and BS7671 while offering additional safety features.
- + Aesthetically Pleasing: A sleek, modern design that blends seamlessly into modern living environments in both surface and flush mounted options.
- + Expanded Range & Configurations: Available in surface and flush mounted options, with single or dual-row configurations to accommodate different installation requirements.





#### Perfect for:

- + High-end multi-residential installations requiring superior technical performance
- + Installers seeking premium ease-of-installation features
- + Designers and homeowners who value both safety and stylish design

#### Which One is Right for You?

Whether you need a cost-effective, compliant solution (Defender 1.0) or a premium, feature-rich consumer unit designed for modern living (Defender 2.0), we have the perfect fit for your project.

Both Defender 1.0 and Defender 2.0 are built to last, protect, and perform - the choice comes down to your project's specific needs.

#### Some of the most important aspects are featured here:

All Defender 2.0 Consumer Units are packed with enhanced features and benefits.

- Tested by reputed third party in accordance with BS EN 61439-3: 2012 including Annex ZB
- + Up to 100A (InA) rated
- + Type A RCDs and RCBOs as standard
- + Surface and Flush Mounted versions available
- + Up to 24 modules Single Row
- + Up to 44 modules Dual Row



# **NEW Generation**



#### **External Features**

- + UV Powder coated paint Colour finish RAL9016 seamlessly blending into today's modern residential installations
- + Extensive number of cable entry points

Allowing easy installation

#### + Modern curved design with flush front lid

For the most demanding and visible installations blending in with today's modern living environments where the Consumer Unit is on show

+ Designed by Micieli



Locking kits available

#### **Retained screws**



Fitted on the enclosure lid for ease of fixing and convenience, no more lost cover screws



#### Unique hinged lid design

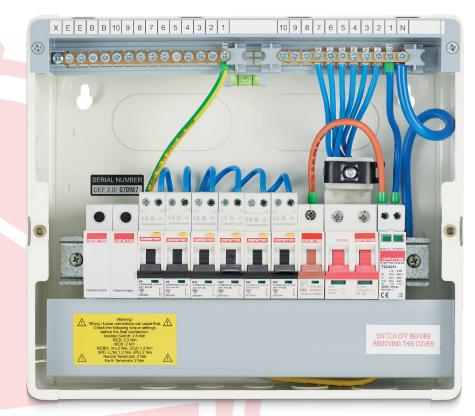
Lid can be latched open for convenience during installation tests and circuit identification



## Finger operated mechanical lid clip

Safety feature. Needs to be pressed to be opened

# **NEW Generation**





#### **Internal Features**



#### Spirit level

High quality spirit level. For added installation guidance (Surface Mounted version only) Π



#### Cable clamp Meter Tails Retention

Clamp Standard on all Defender 2.0 Consumer Units



## Surge protection device

Available in kit form or pre-fitted



#### Busbar cover

Snappable copper floating busbar with easy secure clip-in busbar cover – For faster installation and maximum flexibility

#### Flush Features

- + Full metal din rail For secure device fixing
- + Flush front lid Only protrudes 23mm when installed
- + Adjustable assembly frame Allowing for different plasterboard depths
- + 2 Part flush design Allowing for 1<sup>st</sup> fix and 2<sup>nd</sup> fix Installation

# Surface

## Switch Disconnect Incomer Consumer Units

2 - 10 Way: 63A CU ISO Incomer

14 - 42 Way: 100A Dual Row CU ISO Incomer 2 Way: 80A CU ISO Incomerr 4 - 22 Way: 100A CU ISO Incomer







	63A Rating
Size:	Product Code:
2 Way	SDD026MS
6 Way	SDD066MS
10 Way	SDD106MS
Populated	
10 Way	

+ 6 eRCB0 + 4 Blank

+ 6 eRCB0 + 4 Blank

	80A Rating
Size:	Product Code:
2 Way	SDD028MS

SDD106MS-P01

	100A Rating	
	Without SPD	With SPD
Size:	Product Code:	Product Code:
4 Way	SDD041MS	SDD041SPMS
6 Way	SDD061MS	SDD061SPMS
8 Way	SDD081MS	SDD081SPMS
10 Way	SDD101MS	SDD101SPMS
12 Way	SDD121MS	SDD121SPMS
14 Way	SDD141MS	SDD141SPMS
16 Way	SDD161MS	SDD161SPMS
18 Way	SDD181MS	SDD181SPMS
20 Way	SDD201MS	SDD201SPMS
22 Way	SDD221MS	
Dual Row		
6 + 8 Way (Total 14 way)	SDD2141MS	
14 + 16 Way (Total 30 way)	SDD301MS	
20 + 22 Way (Total 42 way)	SDD421MS	
Populated		
10 Way		

SDD101MS-P01

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#### **RCD** Incomer Consumer Units

**6 - 10 Way:** 63A CU RCD Type A Incomer **6 Way:** 80A CU RCD Type A Incomer **10 - 20 Way:** 100A CU RCD Type A Incomer



	63A Rating
Size:	Product Code:
6 Way	SDR066AMS
10 Way	SDR106AMS
	80A Rating
Size:	Product Code:
6 Way	SDR068AMS
	100A Rating
Size:	Product Code:
10 Way	SDR101AMS
4.4.14/	
14 Way	SDR141AMS
14 Way 16 Way	SDR141AMS SDR161AMS

#### Garage Unit

**2 Way:** 63A CU RCD Type A Incomer

Garage Unit: 63A RCD Type A + 16A MCB + 6A MCB



	63A Rating
Size:	Product Code:
2 Way	SDR026AMS
Populated	
Garage Unit	SDR026AMS-P01

Other populated configurations available on request

#### Split Load Consumer Units

8 - 16 Way: 63A CU ISO Incomer + 1 RCD Type A 8 - 20 Way: 100A CU ISO Incomer + 1 RCD Type A



	63A Rating
Size:	Product Code:
8 Way	SDS0816AMS
12 Way	SDS1216AMS
14 Way	SDS1416AMS
16 Way	SDS1616AMS

	100A Rating
Size:	Product Code:
8 Way	SDS0811AMS
12 Way	SDS1211AMS
14 Way	SDS1411AMS
16 Way	SDS1611AMS
18 Way	SDS1811AMS
20 Way	SDS2011AMS

### Flexible High Integrity Split Load Dual **RCD Consumer Units**

6 - 16 Way: 63A CU ISO Incomer

+ 2 RCD Type A

6 - 18 Way:

100A CU ISO Incomer + 2 RCD Type A

26 - 38 Way: 100A Dual Row CU ISO Incomer + 2 RCD Type A



	63A Rating	
	Without SPD	With SPD
Size:	Product Code:	Product Code:
6 Way	SDDS06166AMS	
8 Way		SDDS08166ASPMS
10 Way	SDDS10166AMS	SDDS10166ASPMS
12 Way	SDDS12166AMS	SDDS12166ASPMS
14 Way	SDDS14166AMS	SDDS14166ASPMS
16 Way	SDDS16166AMS	
Populated		
6 Way + 6MCB	SDDS06166AMS-P01	
10 Way + 10MCB	SDDS10166AMS-P01	_
12 Way + 10MCB	SDDS12166AMS-P01	

Other populated configurations available on request





	100A	Rating
	Without SPD	With SPD
Size:	Product Code:	Product Code:
6 Way	SDDS06111AMS	
8 Way		SDDS08111ASPMS
10 Way	SDDS10111AMS	SDDS10111ASPMS
12 Way	SDDS12111AMS	SDDS12111ASPMS
14 Way	SDDS14111AMS	SDDS14111ASPMS
16 Way	SDDS16111AMS	SDDS16111ASPMS
18 Way	SDDS18111AMS	
Dual Row 12 + 14 Way (Total 26 way) + 2 RCD Type A	SDDS26111AMS	
18 + 20 Way (Total 38 way) + 2 RCD Type A	SDDS38111AMS	
Populated		
6 Way + 6 MCB	SDDS06111AMS-P01	
10 Way + 10 MCB	SDDS10111AMS-P01	SDDS10111ASPMS-P01
12 Way + 10 MCB	SDDS12111AMS-P01	SDDS12111ASPMS-P01
14 Way + 10 MCB	SDDS14111AMS-P01	SDDS14111ASPMS-P01
16 Way + 10 MCB	SDDS16111AMS-P01	SDDS16111ASPMS-P01
	SDDS18111AMS-P01	

#### **Empty Enclosures**

4 - 24 Mod:

IP2XC/IP4X Mod Metal Encl c/w Earth/ Neutral



Size:	Product Code:
4 Mod	SDME04MS
6 Mod	SDME06MS
8 Mod	SDME08MS
10 Mod	SDME010MS
12 Mod	SDME012MS
14 Mod	SDME014MS
16 Mod	SDME016MS
18 Mod	SDME018MS
20 Mod	SDME020MS
22 Mod	SDME022MS
24 Mod	SDME024MS

## Rear Cable Top Entry Bracket

**12 - 24 Mod:** Rear Cable Top Entry Bracket

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Product Code:
RCEB-TE-12M-D2
RCEB-TE-16M-D2
RCEB-TE-18M-D2
RCEB-TE-20M-D2
RCEB-TE-22M-D2
RCEB-TE-24M-D2

## Technical Data for Surface CU:

Standard	BS EN 61439-3: 2012 Including Annex ZB (16kA)
Max Current Rating (InA) *	100A
Rated Operating Voltage (Ue)	230V AC 50Hz
Short Circuit Withstand (Icw)	10kA 0.1 sec
Poles	1
Cable Entry/Exit (KO's)	20, 25 & 32mm
Material	1.2mm Sheet Steel
IP Protection Rating	IP2XC/IP4X

Impact Rating	IK05
RAL Colour	9016
Fixing	Surface
Terminal Torque (N.m)	1.5
Module Width	17.8mm

Please see product description for individual enclosure InA rating as each Consumer Unit differs. The upstream over current protection device must not exceed the enclosure InA rating.

# Flush

## Switch Disconnect Incomer Consumer Units

**6 - 8 Way:** 80A Flush Mounted CU ISO Incomer **8 - 18 Way:** 100A Flush Mounted CU ISO Incomer

#### **14 – 30 Way:** 100A Flush Mounted Dual Row CU ISO Incomer



	80A Rating
Size:	Product Code:
6 Way	FDD068MS
8 Way	FDD088MS

	100A Rating	
	Without SPD	With SPD
Size:	Product Code:	Product Code:
8 Way		FDD081SPMS
10 Way	FDD101MS	
12 Way		FDD121SPMS
14 Way	FDD141MS	FDD141SPMS
16 Way	FDD161MS	FDD161SPMS
18 Way	FDD181MS	
Dual Row		
Size:	Product Code:	
6 + 8 Way (Total 14 way)	FDD2141MS	
14 + 16 Way (Total 30 way)	FDD301MS	

## **RCD** Incomer Consumer Units

**6 Way:** 80A Flush Mounted CU RCD Type A Incomer **10 - 18 Way:** 100A Flush Mounted CU RCD Type A Incomer



	80A Rating
Size:	Product Code:
6 Way	FDR068AMS

	100A Rating	
Size:	Product Code:	
10 Way	FDR101AMS	
14 Way	FDR141AMS	
16 Way	FDR161AMS	
18 Way	FDR181AMS	

## Flexible High Integrity Split Load Dual RCD Consumer Units

6 - **12** Way:

63A CU ISO Incomer + 2 RCD Type A



	63A Rating	
	Without SPD	With SPD
Size:	Product Code:	Product Code:
6 Way	FDDS06166AMS	
10 Way	FDDS10166AMS	FDDS10166ASPMS
12 Way	FDDS12166AMS	

Other populated configurations available on request

6 - 14 Way: 80A CU ISO Incomer + 2 RCD Type A



	80/	80A Rating	
	Without SPD	With SPD	
Size:	Product Code:	Product Code:	
6 Way	FDDS06188AMS		
10 Way	FDDS10188AMS	FDDS10188ASPMS	
12 Way	FDDS12188AMS		
14 Way	FDDS14188AMS		

## Technical Data for Flush CU:

Standard	BS EN 61439-3: 2012 Including Annex ZB (16kA)
Max Current Rating (InA) *	100A
Rated Operating Voltage (Ue)	230V AC 50Hz
Short Circuit Withstand (Icw)	10kA 0.1 sec
Poles	1
Cable Entry/Exit (KO's)	20, 25 & 32mm
Material	1.2mm Sheet Steel
IP Protection Rating	IP2XC/IP4X

Impact Rating	IK05	
RAL Colour	9016	
Fixing	Flush	
erminal Torque (N.m)	1.5	
Module Width	17.8mm	

Please see product description for individual enclosure InA rating as each Consumer Unit differs. The upstream over current protection device must not exceed the enclosure InA rating.

#### Isolators



	63A Rating
Product:	Product Code:
63A Double Pole Isolator	CPD63
	100A Rating
Product:	Product Code:
Product: 100A Double Pole Isolator	Product Code: CPD100

## Technical Data for Isolator:

Standard	EN / IEC60947-3	Mechanical endurance	10000
Rated currents	63, 100A	Type of terminal	Lug type and Pin type
Rated voltage	2 pole 230 AC 50/60Hz	Terminal capacity	Cables up to 50mm2
Jtilization category	AC-22A	Ambient temperature (oC)	-5oC to +40oC, Max.95% humidity
CW	12le, t=0.1s	Storage temperature (oC)	-40~+75
Rated short-circuit making capacity Icn	20le, t=0.1s	Altitude (meters)	Max. 2,000
Rated making & breaking capacity	3le, 1.05Ue, COS =0.65	Protection degree	IP20
Rated insulation voltage Ui	690V		Mounting on 35mm DIN rail
Rated impulse withstand voltage Uimp	4000V	Module Width	17.8mm per pole
Electrical endurance	1500		

### RCDs

**30mA:** 63A Type A 2 Pole RCD **30mA and 100mA:** 100A Type A 2 Pole RCD



63A Rating		
Product Code:		
CPR63A		
100A Rating		
100A Rating Product Code:		
Product Code:		

#### Technical Data for RCD:

Standard	Confirming to EN / IEC61008-1
Rated conditional short-circuit current, Inc	6kA
Protection	Residual current
Туре	A
Rated current, In	63, 100
Number of poles	2(1+N)
Rated sensitivity currents, I Δn	30,100mA
Rated residual non-operating current	0.5 X I ∆n
Rated impulse withstand voltage Uimp	6000V
Rated voltages 2pole	230VAC

Ambient temperature	-5oC to +40oC, Max. 95%humidity
Residual current disconnection time	≤0.1s
Rated residual current making & breaking	500A for In=25,40A
Capacity, I∆m	630A for In=63,80,100
Type of trip	Electro-magnetic release
Type of terminal	Lug type and Pin type
Terminal capacity	Cables up to 35mm2
Protection degree	IP20
Installation	35mm DIN rail

## MCB 1P 6kA B and C Curve

**3A - 63A:** 1P 6kA B, C & D Curve MCB



Product Prefix:	Current Rating:	Trip Curve B or C:
CPB06	03	-
CPB06	06	-
CPB06	10	-
CPB06	16	-
CPB06	20	-
CPB06	25	-
CPB06	32	-
CPB06	40	-
CPB06	50	-
CPB06	63	-
Example: CPB06 <mark>06 B</mark>	Add code: 03 - 63 For rating	Add code: B or C for Curve type

#### Technical Data for MCB:

Standard	Confirming to IEC/BS EN60898-1
Breaking capacity	6kA
Protection	Against overload and short circuit
Rated current In	3, 6, 10, 16, 20, 25, 32, 40, 50, 63A
Rated voltage	1pole 230 AC 50/60Hz, Rated insulation voltage Ui: 500V,
	Rated impulse withstand voltage Uimp: 6000V,
	Energy limiting class: 3
Ambient temperature	-5oC to +40oC pursuant to BS EN / IEC60898
Characteristic	Thermal operating limit: (1.13-1.45) x In
	Magnetic operating: B: (3-5) x In C: (5-10) x In D: (10-20) x In

Number of poles	1P
Type of trip	Thermal / magnetic release
Type of terminal	Lug type and Pin type
Terminal capacity	16mm2 flexible or 25mm2 rigid up to 25A ratings
	25mm2 flexible or 35mm2 rigid for 32A to 63A ratings
Protection degree	IP20
Installation	Mounting on 35mm DIN rail
Torque (N.m)	2
Width	17.5mm per pole

## eRCBO 1P 6kA Compact B and C Curve

**6A - 40A:** 6kA Type A B & C Curve SP eRCBO



Product Prefix:	Current Rating:	Trip curve B or C:
CCPBR06	06A	-
CCPBR06	10A	-
CCPBR06	16A	-
CCPBR06	20A	-
CCPBR06	25A	-
CCPBR06	32A	-
CCPBR06	40A	-
Example: CCPBR06 20A B	Add code: 06A - 50A For rating	Add code: B or C for Curve type

#### Technical Data for eRCBO:

Standard	IEC/BS EN61009	Characteristic	B.C
Breaking Capacity	6kA	Electrical endurance	10000
Number of poles	1P+N (1 module – fixed neutral)	Mechanical endurance	20000
Rated currents	6, 10, 16, 20, 25, 32, 40A	Ambient temperature	-5oC to +40oC, Max. 95%humidity
Rated voltage	230VAC	Connection terminal	Flexible 16mm2, Rigid 25mm2
Rated Tripping Current	30mA	Type of terminal	Lug type and Pin type
Residual Operating Characteristics	A	Module Width	17.8mm / module
Residual Current Disconnection Time		Torque N.m	2

### 1P+N Bi-Directional 6KA Compact eRCBO Curve B & C

**6A - 40A:** 6kA Type A B & C Curve 1P+N 1 Mod eRCBO



Product Prefix:	Current Rating:	Trip curve B or C:	Model:
CPBR06	06A		Ν
CPBR06	10A		Ν
CPBR06	16A		Ν
CPBR06	20A		Ν
CPBR06	25A		Ν
CPBR06	32A		N
CPBR06	40A		N
Example: CPBR0640A <mark>B</mark> N	Add code: 06A - 40A For rating	Add code: B or C for Curve type	

\*2 Pole eRCBO's available. Please see the three phase product range.

#### Technical Data for eRCBO:

Standard	BS EN / IEC 61009	Characteristic	B.C
Breaking Capacity	6kA	Electrical endurance	10000
Number of poles	1P+N (1 module – switched neutral)	Mechanical endurance	20000
Rated currents	6, 10 ,16, 20, 25, 32, 40A	Ambient temperature	-5oC to +40oC, Max. 95%humidity
Rated voltage	230VAC	Connection terminal	Flexible 16mm2, Rigid 25mm2
Rated Tripping Current	30mA	Type of terminal	Lug type and Pin type
Residual Operating Characteristics	A	Module Width	17.8mm / module
Residual Current Disconnection Time	-0.4	Torque N.m	2

## AFDD 6kA MCB or RCBO B and C Curve

6A - 40A: 6kA Type A B & C Curve 1 Mod AFDD RCBO and MCB



Product Prefix:	Function:	kA Rating:	Current Rating:	Trip curve B or C:	Model:
AFD	-	06	06A	-	-1
AFD	-	06	10A	-	-1
AFD	-	06	16A	-	-1
AFD	-	06	20A	-	-1
AFD	-	06	25A	-	-1
AFD	-	06	32A	-	-1
AFD	-	06	40A	-	-1
	Add code: B for MCB or R for RCBO		Add code: 06A - 40A For rating	Add code: B or C for Curve type	

Example: AFD R 06 25A B -1

## Technical Data for AFDD

Standard	IEC/BS EN 62606, IEC/BS EN 61009-1	Characteristic	B,C
Breaking Capacity	6kA	Electrical endurance	4000
Number of poles	1P+N (1 module)	Mechanical endurance	20000
Rated currents	6, 10, 16, 20, 25, 32, 40A	Ambient temperature	-5oC to +40oC, Max. 95%humidity
Rated voltage	230VAC	Connection terminal	Flexible 16mm2, Rigid 25mm2
Rated Tripping Current	30mA	Type of terminal	Lug type and Pin type
Residual Operating Characteristics	А	Module Width	17.8mm / module
Residual Current Disconnection Time		Torque N.m	2

## Surge Arrestor

#### 40kA:

Surge 40kA 1+1 Type 2 SPD Retro Fit Kit



#### Contactors





Product:	
40kA	

Product Code: T2C4011KIT

Product: **Product Code:** 20A 230V 1N/1NC (1 Mod) COA20-11/230 20A 230V 2NO (1 Mod) COA20-20/230 25A 230V 4NC (2 Mod) COA25-04/230 25A 230V 4NO (2 Mods) COA25-40/230 40A 230V 2NO (3 Mods) COA40-20/230 40A 230V 4NO (3 Mods) COA40-40/230 63A 230V 2NO (3 Mods) COA63-20/230 63A 230V 4NO (3 Mods) COA63-40/230 63A 230V AC/DC 4NO (3 Mods) COD63-40/230

### **Timers & Bell Transformers**





Product:	Product Code:
7Day/24Hr Digital Timer 1 Ch 2 Mod	TSD1T
24HR Analogue Timer 1 Ch 16A Resist	TSDAS1
Bell Transformer 1A 8VA Output	TSBT2

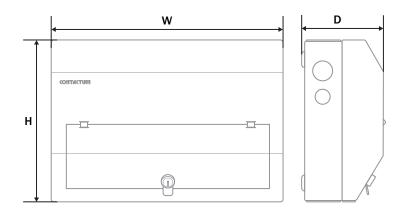
### Accessories





Product:	Product Code:
MCB Blank	CPBBL
1/4 Turn Camlock Accessory	DCA01
Key Lock Camlock Accessory	DCA02
Pack of 10 MCB/RCBO Toggle Locking Device (New Design)	DCA10
Pack of 10 AMD3 33mm Membrane Grommet	DCA19
AMD3 Membrane Grommet Kit	DCA20
40/32mm Tails Red Kit Metal	DCA21
40/32mm Tails Red Kit Plastic	DCA22
Defender 1.0 C/U Stacking & Link (DDS) Kit	DCA24
Defender 1.0 C/U Stacking & Link (DD) Kit	DCA25
2.5-50mm2 Earth Cable Connector	DCA26
Defender C/U 14 Mod Spare Busbar and Cover	DCA30
Defender C/U 22 Mod Spare Busbar and Cover	DCA31

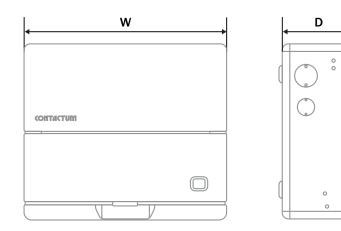
# Dimensions



#### **Defender 1.0 Dimensions**

Allow 2 modular ways for each Switch Disconnector or RCD and allow 1 modular way for each MCB, RCBO or AFDD

Dimensions	2 Mod	4 Mod	6 Mod	8 Mod	<b>12 Mod</b>	14 Mod	<b>16 Mod</b>	<b>18 Mod</b>	20 Mod	22 Mod
Height (H) mm	260	260	260	260	260	260	260	260	260	260
Width (W) mm	114	150	186	222	294	330	366	402	438	474
Depth (D) mm	130	130	130	130	130	130	130	130	130	130

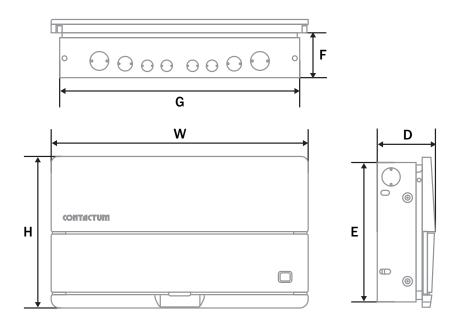


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#### Surface Mounted Defender 2.0 Dimensions

Allow 2 modular ways for each Switch Disconnector or RCD and allow 1 modular way for each MCB, RCBO or AFDD

Dimensions	4 Mod	6 Mod	8 Mod	<b>10 Mod</b>	<b>12 Mod</b>	14 Mod	16 Mod	16 Mod	18 Mod	20 Mod	22 Mod	24 Mod	32 Mod	44 Mod
Height (H) mm	262	262	262	262	262	262	262	524	262	262	262	262	524	524
Width (W) mm	155	227	227	299	299	371	371	227	407	443	479	515	371	479
Depth (D) mm	114	114	114	114	114	114	114	114	114	114	114	114	114	114
Dual Row								DR					DR	DR



#### Flush Mounted Defender 2.0 Dimensions

Allow 2 modular ways for each Switch Disconnector or RCD and allow 1 modular way for each MCB, RCBO or AFDD

Dimensions	8 Mod	<b>12 Mod</b>	16 Mod	<b>16 Mod</b>	<b>18 Mod</b>	20 Mod	32 Mod
Height (H) mm	262	262	524	262	262	262	524
Width (W) mm	299	371	299	443	479	515	443
Depth (D) mm	100	100	100	100	100	100	100
Recessed Height (E) mm	242	242	508	242	242	242	508
Recessed Width (G) mm	264	336	264	408	444	480	408
Recessed Depth (F) mm	77	77	77	77	77	77	77
Dual Row			DR				DR

## Technical Data for Consumer Units

Standard	BS EN 61439-3:2012 Including Annex ZB (16kA)
Max Current Rating (InA) *	100A
Rated Operating Voltage (Ue)	230V AC 50Hz
Short Circuit Withstand (Icw)	10kA 0.1 sec
Poles	1
Cable Entry/Exit (KO's)	20, 25 & 32mm
Material	1.2mm Sheet Steel
IP Protection Rating	IP2XC/IP4X
mpact Rating	IKO5
RAL Colour	9016
Fixing	Surface & Flush (Enclosure type dependant)
Ferminal Torque (N.m)	1.5
Module Width	17.8mm

Please see product description for individual enclosure InA rating as each Consumer Unit differs. The upstream over current protection device must not exceed the enclosure InA rating.

### Defender 1.0 Consumer Units

TEST	CERTIFICATE	
	Contactum Limited Victoria Works, Edgware Road,	
	Contactum Limited Victoria Works, Edgware Road,	DEI
	Contactum Limited Victoria Works, Edgware Road,	DE
Issued to:	Victoria Works, Edgware Road,	DE
	LONGON NVV26LF,	$\triangle$
	United Kingdom	S
For the product:	Low-voltage switchgear and controlgear assembly - Distribution boards intended to be operated by ordinary persons (DBO)	D DEKR
Trade name:	Contactum Defender	EKRA D D DEKR
Type/Model:	DD - CU 1PH 100A 4-20 Way Switch Disconnect Incomer	D DEN
	$I_{nx}$ 100 A, $U_e$ 230 V, U, 400 V, $U_{mp}$ 4 KV, IP4X, IK05 $I_{wz}$ 10 KA - 0,1 s (comb busba?), $I_{wz}$ 6 KA at 230 V (incoming units) $I_{ex}$ 6 KA and 10 KA at 230 V (outgoing units) For more details see annex	DEKRA DEKRA LA D DE DEKRA
,	Contactum Limited Victoria Works, Edgware Road, London NW28LF, United Kingdom	RA D D D DEKR KRA D D DEKU EKRA D D DEH
Subject:	Design verification; Construction and performance	A D DE
	IEC 61439-3, 1st ed. 2012-02 Clauses 10.2.3, 10.2.6, 10.2.7, 10.3, 10.4, 10.5, 10.6, 10.7, 10.8, 10.9, 10.10.2.3.5, 10.11, 10.12, 10.13	RA D D DEKRA ERA D D DEKRA
Remarks:	The product complies with the above requirements from the standard.	D DEKR
This Test Certificate is down in report no. 221	granted on account of an examination by DEKRA, the results of which are laid 7234.14-INC, dated 9 October 2017.	DEKRA
manufacturer. The Atte	been carried out on one single specimen of the product, submitted by the station does not include an assessment of the manufacturer's production, uction with the specimen tested by DEKRA is not the responsibility of DEKRA.	DEKRA A D DE DEKRA
Arnhem, 9 October 20	17 Number: 2217234,113	DEKRA
	DEKRA Certification B.V.	D DEKR
	an S.	D DEK
		D DER
	H.L. Schendstok	A D DE
	Certification Manager	RADD
□ Integral publication of this □	certificate and adjoining reports is allowed	CRA DI
DEKRA Certification B.V. M F +31 88 96 83000 F +31 8	leander 1051, 6825 MJ Arnhem P.O. Box 5185, 6802 ED Arnhem, The Netherlands 8 96 83100 www.dekra-certification.com Company registration 09085396	D DEKRA EKRA D D DEKR
		D DEKR

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		DEKRA DA DI
		RA D DEKR
		KRA D DEKR
TES1	CERTIFICATE	7
Issued to:	Contactum Limited Victoria Works,	DEK
	Edgware Road, London NW28LF, United Kingdom	RA
For the product:	Low-voltage switchgear and controlgear assembly - Distribution boards intended to be operated by ordinary persons (DBO)	CRA D
Trade name:	Contactum Defender	D DEN
Type/Model:	DS - CU 1PH 100A 8-18 Way Split Load	D DE
Ratings:	$\begin{array}{l} I_{nA} \ 100 \ A, \ U_{e} \ 230 \ V, \ U_{100} \ 4, \ V, \ IP4X, \ IKO5 \\ I_{ov} \ 10 \ IA - 0, \ 1 \ s \ comb \ busbarrish \ k, \ at \ 230 \ V \ (incoming \ units) \\ I_{ec} \ 6 \ kA \ and \ 10 \ kA \ at \ 230 \ V \ (uot \ uot $	DEKRA DEKRA DEKRA DEKRA DEKRA
Manufactured by:	Contactum Limited Victoria Works, Edgware Road, London WV28LF, United Kingdom	RA D D DEK KRA D D DEK EKRA D D DEK
Subject:	Design verification; Construction and performance	A D D
Requirements:	IEC 61439-3, 1st ed. 2012-02 Clauses 10.2.3, 10.2.6, 10.2.7, 10.3, 10.4, 10.5, 10.6, 10.7, 10.8, 10.9, 10.10.2.3.5, 10.11, 10.12, 10.13	RA D DEKRI CRA D DEKR
Remarks:	The product complies with the above requirements from the standard.	KRA J D DEK
This Test Certificate down in report no. 2	e is granted on account of an examination by DEKRA, the results of which are laid 2217234.12-INC, dated 9 October 2017.	DEKRA
manufacturer. The	as been carried out on one single specimen of the product, submitted by the Attestation does not include an assessment of the manufacturer's production. roduction with the specimen tested by DEKRA is not the responsibility of DEKRA.	
Arnhem, 9 October	2017 Number: 2217234.111	DEK
	DEKRA Certification B.V.	D DEK
	as.	D DE
		DEKRA
	H.L. Schendstok	DEKRA
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DEKRA Certification B.V	. Meander 1051, 6825 MJ Arnhem P.O. Box 5185, 6802 ED Arnhem, The Netherlands 1 88 96 83100 www.dekra-certification.com Company registration 09085396	KRA D DEKR EKRA D D DEKI
		D DEK
		DEKRA

TEST	CERTIFICATE
Issued to:	Contactum Limited Victoria Works, Edgware Road, London NW26LF, United Kingdom
For the product:	Low-voltage switchgear and controlgear assembly - Distribution boards intended to be operated by ordinary persons (DBO)
Trade name:	Contactum Defender
Type/Model:	DDS - CU 1PH 100A 6-16 Way Flexible High Integrity Split Load Dual RCD
Ratings:	$I_{ob}$ 100 A, $U_a$ 230 V, U, 400 V, $U_{egg}$ 4 kV, IP4X, IK05 $I_{egs}$ 10 kA - 0, 1 s (comb busbar), $I_c$ 6 kA at 230 V (outgoing units) $I_{cc}$ 6 kA and 10 kA at 230 V (outgoing units) For more details see annex
Manufactured by:	Contactum Limited Victoria Works, Edgware Road, London NW28LF, United Kingsom
Subject:	Design verification; Construction and performance
Requirements:	IEC 61439-3, 1st ed. 2012-02 Clauses 10.2.3, 10.2.6, 10.2.7, 10.3, 10.4, 10.5, 10.6, 10.7, 10.8, 10.9, 10.10.2.3.5, 10.11, 10.12, 10.13
Remarks:	The product complies with the above requirements from the standard.
	a is granted on account of an examination by DEKRA, the results of which are la 2217234.13-INC, dated 9 October 2017.
manufacturer. The	is been carried out on one single specimen of the product, submitted by the Attestation does not include an assessment of the manufacturer's production. roduction with the specimen tested by DEKRA is not the responsibility of DEKRA
Arnhem, 9 October	2017 Number: 2217234.112
	DEKRA Certification B.V.
	H.L. Schendstok Certification Manager

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		DER
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тест		20
1521	CERTIFICATE	N
Issued to:	Contactum Limited	
	Victoria Works, Edgware Road, London NW26LF, United Kingdom	NK
For the product:	Low-voltage switchgear and controlgear assembly - Distribution boards intended to be operated by ordinary persons (DBO)	
Trade name:	Contactum Defender	D DI EKRJ
Type/Model:	DR - CU 1PH 100A 4-20Way RCD Incomer	NEKR
Ratings:	$I_{ux}$ 80 A. $U_e$ 230 V. U, 400 V. $U_{ux}$ 4 kV, IP4X, IR05 $I_{ux}$ 10 kA - 0,1 s (comb busbar), $I_e$ 6 kA at 230 V (incoming units) $I_e$ 6 kA and 10 kA at 230 V (outgoing units) For more details see annex	
Manufactured by:	Contactum Limited Victoria Works, Edgware Road, London NW28LF, United Kingdom	
Subject:	Design verification; Construction and performance	A D
Requirements:	IEC 61439-3, 1st ed. 2012-02 Clauses 10.2.2, 10.2.3, 10.2.6, 10.2.7, 10.3, 10.4, 10.5, 10.6, 10.7, 10.8, 10.9, 10.10.2.3.5, 10.11, 10.12, 10.13	RA J DEK CRA
Remarks:	The product complies with the above requirements from the standard.	KRA D D
This Test Certificate down in report no. 2	is granted on account of an examination by DEKRA, the results of which are laid 217234.11-INC, dated 12 February 2018.	
manufacturer. The A	s been carried out on one single specimen of the product, submitted by the titestation does not include an assessment of the manufacturer's production. oduction with the specimen tested by DEKRA is not the responsibility of DEKRA.	
Arnhem, 9 February	2018 Number: 2217234.110	DE
	DEKRA Certification B.V.	D DI KRA
	An S.	EKRA
		DEKR
	H.L. Schendstok	DEKR
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DEKRA Certification B.V.	Meander 1051, 6825 MJ Amhem P.O. Box 5185, 6802 ED Arnhem. The Netherlands	CRA > DE
	188 96 83100 www.dekra-certification.com Company registration 09085396	D DE
		ÞD

TYPE TE: CERTIFIC			
COMPLETE TYP	ETESTS		
No B25-21-AV-01	E_FDDSv1-CERT		
Applicant	Contactum Ltd 2 Blackmoor Lane. Croxley Green Business Park, Watford London WD18 8GA. United Kingdom		
Manufacturer	Alfanar Electrical Systems Madinet alfanar, 3ª Industrial City P.O. Box 564. Riyadh 11383. Saudi Arabia		
Product	Consumer Units FDDS Defender 2.0 Designation: Contactum Defender 2.0 Main ratings: Rated Current: 80 A Rated Insulation Voltage: 400 V Rated Operation Voltage: 230 V Rated Frequency; 50 Hz Rated Frequency: 4 kV		
	Fulfills the type-test requirements of:		
Standard	BS EN 61439-3:2012 Edition 1.0 Clauses 10:22-10:23.1-10:23.2-10:26-10:27-10:3-10.4-10:52- 10:53-10:6-10:7-10:8-10:92-10:93-10:10-10:11-Annex ZB 16 kA with Fuse +0.12/10:13		
	Test results are described in the following documents:		
	Type test report No: B25-21-AV-01E_FDDSv1		
Certificate issued on	6th September 2021		
	Electronic signature		
SERVICES LAN PER	Luis Martinez Cancela Head of Electrical Equipment Laboratory		
	* TECHALI This certificate, issued by TECNALIA, implies exclusively type test compliance of the product range for which tested objects are representative. Certificate and associative type test report may be issued either in electronic or printed form		

YPE TE ERTIFI			tecnalia) Inspir
COMPLETE TY	PE TESTS		
No B25-21-AV-	01E_SDDSv1-CE	RT	
Applicant		n Ltd e. Croxley Green Busine A. United Kingdom	ess Park, Watford
Manufacturer	Alfanar Electrical Systems Madinet alfanar, 3ª Industrial City P.O. Box 564. Riyadh 11383. Saudi Arabia		
Product	Consume	Units SDDS	Defender 2.0
	Designation: Co Main ratings: Ra Ra Ra Ra	ntactum Defender 2.0	100 A 400 V
	Fulfills the type-te	st requirements of:	
Standard	Clauses 10.2.2 - 1	7 - 10.8 - 10.9.2 - 10.9.	<b>ition 1.0</b> 2.6 - 10.2.7 - 10.3 - 10.4 - 10.5.2 - 3 - 10.10 - 10.11 - Annex ZB 16 kA
	Test results are de	escribed in the following	documents:
	Type test rep	ort No: B25-21-AV-	01E_SDDSv1
Certificate issued or	6th September 20	21	
		El	ectronic signature
SERVICES LAS			s Martínez Cancela ctrical Equipment Laboratory
tecnalia	VICES LAG	product range for which tes	° TECI ECNALIA, implies exclusively type test compliance ted objects are representative. Certificate and asso report may be issued either in electronic or printec

CYPE TES CERTIFIC		tecnalia	Business
COMPLETE TYP			
No B25-21-AV-01	E_FDDv1-CERT		
Applicant	2 Blackmoor Lane. Cro. London WD18 8GA. Ur	dey Green Business Park, Watford	
Manufacturer	Alfanar Electrical Systems Madinet alfanar, 3ª Industrial City		
Product	Designation: Contactu Main ratings: Rated Co Rated In: Rated O Rated Fr		0.4 - 10.5.2 - Inex ZB 16 kA
	Fulfills the type-test req	irements of:	
Standard	BS EN 61439-3:2012 Edition 1.0 Clauses 10.2 - 10.2.3.1 - 10.2.3.2 - 10.2.6 - 10.2.7 - 10.3 - 10.4 - 10. 10.5.3 - 10.6 - 10.7 - 10.8 - 10.9.2 - 10.9.3 - 10.10 - 10.11 - Annex ZB with Fuse - 10.12 - 10.13		0.4 - 10.5.2 - inex ZB 16 kA
	Test results are describ	ed in the following documents:	
	Type test report No	B25-21-AV-01E_FDDv1	
Certificate issued on	6 <sup>th</sup> September 2021		
		Electronic signature	9
STRUCES LAB ST		Luis Martínez Cancela Head of Electrical Equipment La	boratory
		his certificate, issued by TECNALIA, implies exclusively roduct range for which tested objects are representative. type test report may be issued either in	Certificate and associate

YPE TE		
COMPLETE TYP	PE TESTS	
No B25-21-AV-0	1E_SDDv1-CERT	
Applicant	Contactum Ltd 2 Blackmoor Lane. Croxley Green Business Park, Walford London WD18 8GA. United Kingdom	
Manufacturer	Alfanar Electrical Systems Madinet alfanar, 3ª Industrial City P.O. Box 564. Riyadh 11383. Saudi Arabia	
Product	Consumer Units SDD 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 Insulation voltage:     4 kV	
	Fulfills the type-test requirements of:	
Standard	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_SDDv1	
Certificate issued on	6 <sup>th</sup> September 2021	
	Electronic signature	
SEAUCES LAR. SP	Luis Martínez Cancela Head of Electrical Equipment Laboratory	
	* TECNALIA. Implies exclusively type lest compliance of product magnetization which lested objects are representative. Certificate and association by the test compliance of the test of the sector of the s	

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