

CONTACTUM



DEFENDER
2.0



Defender

2.0

New generation of Consumer Units
Stylishly designed to blend in with today's modern living

Founded in 1936 we have always based our values on Quality & Safety underpinned with the knowledge that **design is everything.**

With the technical expertise of **alfanar**, our parent company, we have continued this tradition with the development of Defender 2.0 and added some new benchmarks of exceptional aesthetics to seamlessly blend in to modern living environments coupled with outstanding features and benefits to aid designers, installers and specifiers.

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Contactum is a subsidiary company to alfanar.

alfanar is a global company headquartered in Riyadh (KSA), primarily engaged in the manufacturing and trading of a wide variety of low, medium, and high voltage electrical products, in addition to its portfolio of conventional and renewable energy solutions, oil and gas, water treatment, infrastructure, technical services, digital solutions, and electronics engineering.

The hub of alfanar’s manufacturing operations is Medinet alfanar Alsinaiya (alfanar Industrial City), a 700,000 square-meter complex located in Riyadh.

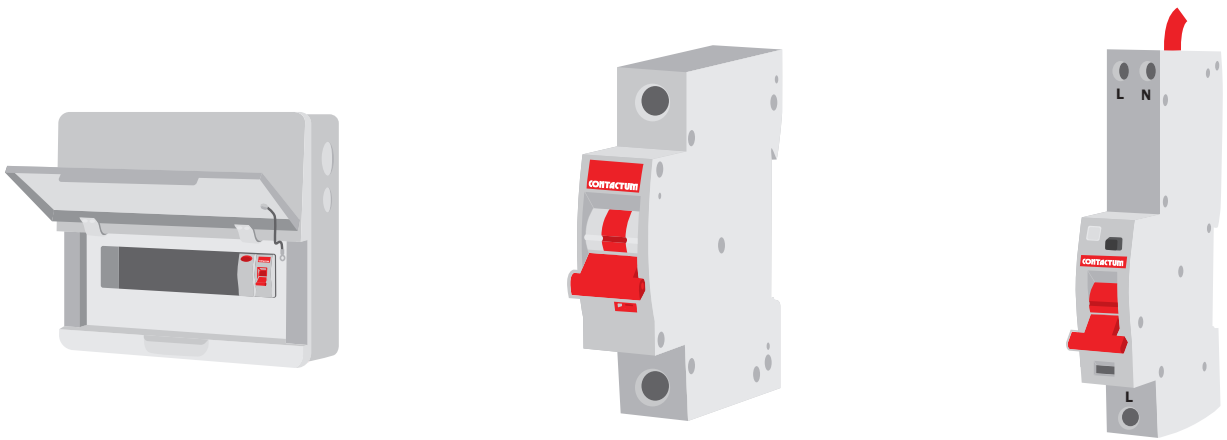
The complex houses an array of ultra-modern manufacturing facilities and laboratories equipped with state-of-the-art technologies and staffed with highly skilled professionals. In addition, alfanar has a network of manufacturing and distribution facilities around the world that includes: Contactum (UK), Kopp (Germany, Tunisia) and ZIV (Spain, India, Ireland/UK, Brazil), EA (Italy), SFA Electric (Turkey), alfanar Electrical Systems (UAE) and alfanar Engineering Services (India).



Defender 2.0

The Defender 2.0 range of Consumer Units has been stylishly designed to seamlessly blend in with today’s modern living environments whilst at the same time offering enhanced safety and complete compliance with the **18th Edition wiring regulations BS7671:2018.**

The **NEW** range includes:



Surface Mounted in Single or Dual Row options and we now offer a new range of Flush Mounted Consumer Units.

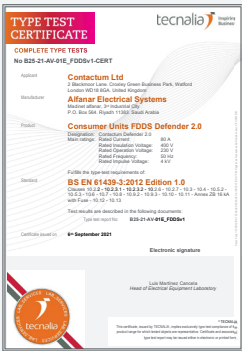
Pre-Populated with MCBs and factory fitted Surge Protection options are also available along with an extensive range of accessories to compliment the range.

We have also added new devices to our range including Compact RCBOs and Single Module AFDD/RCBO combination devices for enhanced protection.

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 Rows



18th Edition

II

Significant Changes

When AMD2 of the 18th 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, failure of a safety service 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.

Design Service

Circuit Protection

The Contactum design service for Circuit Protection allows you to create a bespoke design for factory assembled units to be supplied for your project.

If your project requires a fully customised solution or specific outgoing devices pre-fitted then this service will be of benefit.

It enables a highly reduced labour time on site while also ensuring continuity across your project.

Our team can help you to build the best configuration to suit your project. Using standard and non standard Contactum devices and accessories we can supply your units fully assembled, ready for installation.

All you need to do is contact our dedicated contractor sales team via the email address below. Discuss the requirement, agree a design configuration and confirm the quantities.*

We can then provide a unique quotation for your exact requirements. Once agreed and an order is placed via one of our selected distributor partners we will assemble and dispatch your boards ready for installation.

The design service is perfect for all project applications and we work closely with M&E Consultants, Electrical Contractors and Housing Developers for peace of mind guaranteed compliance and continuity across the project.

*Minimum order quantities apply

- + Dedicated contractor sales team
- + Fast turnaround time from enquiry to delivery
- + Faster installation time
- + Reduced labour costs
- + Reduced waste from packaging
- + No loose product on site
- + Boards correctly configured
- + Available for all circuit protection ranges



Contact our Customer Service Team:

Telephone:
0208 208 7419

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


CONTACTUM

NEW Generation


II

Surface and Flush Consumer Units

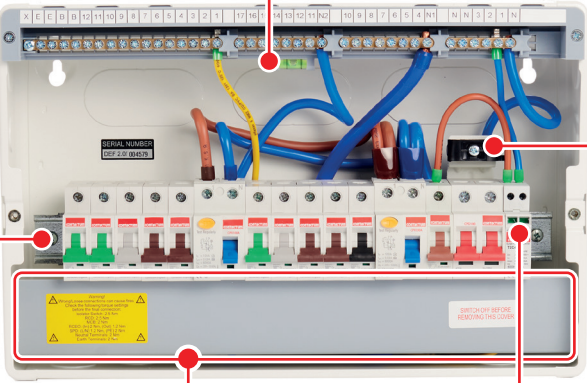
Interior Features




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



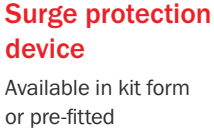
Cable clamp
Meter Tails Retention Clamp Standard on all Defender 2.0 Consumer Units



Full metal din rail
For secure device fixing



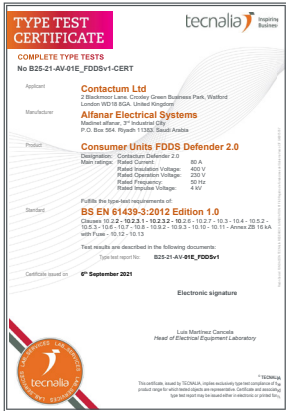
Busbar cover
Snappable copper floating busbar with easy secure clip-in busbar cover – For faster installation and maximum flexibility




Surge protection device
Available in kit form or pre-fitted

Technical Details:

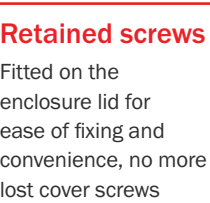
- 18th Edition Compliance
 - Type test certificate issued by third party
 - Compliant with BS EN 61439-3 including annex ZB
 - Up to 100A without derating
 - Icw 10kA 0.1 sec
 - Icc 6kA and 10kA (Outgoings)
- Type A eRCBO complying to BS EN 61009-1
 - Type A RCD complying to BS EN 61008-1
 - MCB complying to BS EN 60898
 - Surface and Flush Mounted versions available
 - Designed by Micieli



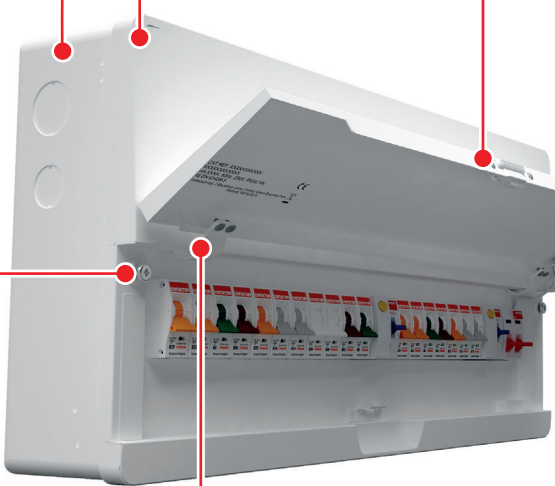
External Features




UV Powder coated paint
Colour finish RAL9016 seamlessly blending into today's modern residential installations




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




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



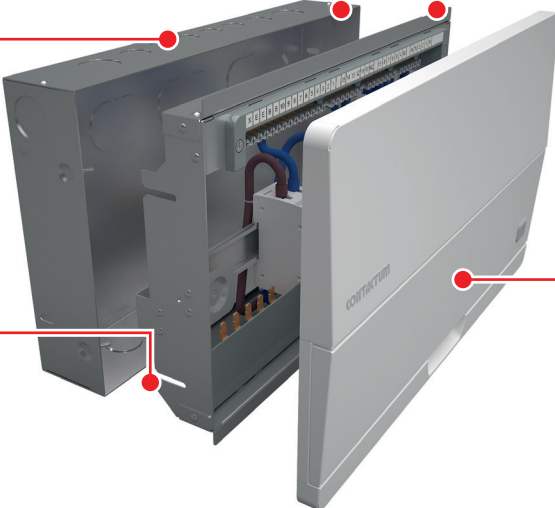
Finger operated mechanical lid clip
Safety feature. Needs to be pressed to be opened




Optional lock device



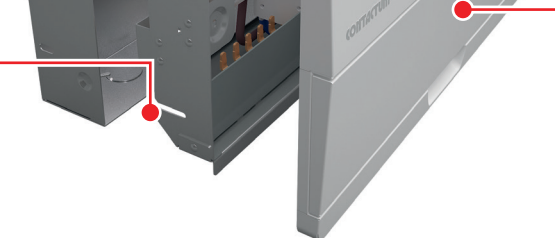
Unique hinge lid design
Lid can be latched open for convenience during installation tests and circuit identification




Extensive number of cable entry points
Allowing easy installation



2 Part flush design
Allowing for 1st fix and 2nd fix Installation



Adjustable assembly frame
Allowing for different plasterboard depths



Flush front lid only protrudes 23mm when installed

Surface

II

Defender 2.0 Consumer Units

Flexible High Integrity Split Load Dual RCD Consumer Units

6 - 16 Way:
63A CU ISO Incomer
+ 2 RCD Type A



63A Rating	
Size:	Product Code:
6 Way	SDDS06166AMS
10 Way	SDDS10166AMS
12 Way	SDDS12166AMS
14 Way	SDDS14166AMS
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

6 - 18 Way:
100A CU ISO Incomer
+ 2 RCD Type A



8 - 14 Way:
63A CU ISO Incomer
+ 2 RCD Type A

63A Rating	
With SPD	
Size:	Product Code:
8 Way	SDDS08166ASPMS
10 Way	SDDS10166ASPMS
12 Way	SDDS12166ASPMS
14 Way	SDDS14166ASPMS

100A Rating		
Size:	Without SPD	With SPD
	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	
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
18 Way + 10 MCB	SDDS18111AMS-P01	

Surface

II

Defender 2.0 Consumer Units

Dual Row Consumer Units

14 - 42 Way:
100A Dual Row
CU ISO Incomer

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



100A Rating	
Size:	Product Code:
6 + 8 Way (Total 14 way)	SDD2141MS
14 + 16 Way (Total 30 way)	SDD301MS
20 + 22 Way (Total 42 way)	SDD421MS
12 + 14 Way (Total 26 way) + 2 RCD Type A	SDDS26111AMS
18 + 20 Way (Total 38 way) + 2 RCD Type A	SDDS38111AMS

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

Technical Details for Surface CU:

Standard	BS EN 61439-3:2012 Including Annex ZB (16kA)	Impact Rating	IK05
Max Current Rating (InA) *	100A	RAL Colour	9016
Rated Operating Voltage (Ue)	230V AC 50Hz	Fixing	Surface
Short Circuit Withstand (Icw)	10kA 0.1 sec	Terminal Torque (N.m)	1.5
Poles	1	Module Width	17.8mm
Cable Entry/Exit (KO's)	20, 25 & 32mm	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.	
Material	1.2mm Sheet Steel		
IP Protection Rating	IP2XC/IP4X		

Surface

II

Defender 2.0 Consumer Units

Switch Disconnect Incomer Consumer Units

2 - 10 Way:	2 Way:	4 - 22 Way:
63A	80A	100A
CU ISO Incomer	CU ISO Incomerr	CU ISO Incomer



63A Rating	
Size:	Product Code:
2 Way	SDD026MS
6 Way	SDD066MS
10 Way	SDD106MS
Populated	
10 Way + 6 eRCBO + 4 Blank	SDD106MS-P01

80A Rating	
Size:	Product Code:
2 Way	SDD028MS

100A Rating		
Size:	Without SPD Product Code:	With SPD Product Code:
4 Way		SDD041SPMS
6 Way	SDD061MS	
8 Way		SDD081SPMS
10 Way	SDD101MS	
12 Way		SDD121SPMS
14 Way	SDD141MS	SDD141SPMS
16 Way	SDD161MS	SDD161SPMS
18 Way	SDD181MS	SDD181SPMS
20 Way	SDD201MS	SDD201SPMS
22 Way	SDD221MS	
Populated		
10 Way + 6 eRCBO + 4 Blank	SDD101MS-P01	

Empty Enclosures

4 - 24 Mod:
IP2XC/IP4X Mod Metal Encl
c/w Earth/ Neutral



Size:	Product Code:
4 Mod	SDME04MS
8 Mod	SDME08MS
12 Mod	SDME012MS
16 Mod	SDME016MS
18 Mod	SDME018MS
20 Mod	SDME020MS
22 Mod	SDME022MS
24 Mod	SDME024MS

Surface

II

Defender 2.0 Consumer Units

RCD Incomer Consumer Units

6 - 10 Way:	6 Way:	10 - 20 Way:
63A CU RCD	80A CU RCD	100A CU RCD
Type A Incomer	Type A Incomer	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
14 Way	SDR141AMS
16 Way	SDR161AMS
20 Way	SDR201AMS

Garage Unit

2 Way:	Garage Unit:
63A CU RCD	63A RCD Type A + 16A MCB
Type A Incomer	+ 6A MCB



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

Other populated configurations available on request

Rear Cable Top Entry Bracket

12 - 24 Mod:
Rear Cable
Top Entry Bracket



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

Flush

II

Defender 2.0 Consumer Units

Flexible High Integrity Split Load Dual RCD Consumer Units

6 - 12 Way:
63A CU ISO Incomer
+ 2 RCD Type A



Size:	63A Rating	
	Without SPD	With SPD
	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



Size:	80A Rating	
	Without SPD	With SPD
	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)	Impact Rating	IK05
Max Current Rating (InA) *	80A	RAL Colour	9016
Rated Operating Voltage (Ue)	230V AC 50Hz	Fixing	Flush
Short Circuit Withstand (Icw)	10kA 0.1 sec	Terminal Torque (N.m)	1.5
Poles	1	Module Width	17.8mm
Cable Entry/Exit (KO's)	20, 25 & 32mm	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.	
Material	1.2mm Sheet Steel		
IP Protection Rating	IP2XC/IP4X		

Flush

II

Defender 2.0 Consumer Units

Dual Row Consumer Units

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

Size:	100A Rating
	Product Code:
6 + 8 Way (Total 14 way)	FDD2141MS
14 + 16 Way (Total 30 way)	FDD301MS

Switch Disconnect Incomer Consumer Units

6 Way:
80A Flush Mounted
CU ISO Incomer

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



Size:	80A Rating
	Product Code:
6 Way	FDD068MS

Size:	100A Rating	
	Without SPD	With SPD
	Product Code:	Product Code:
8 Way		FDD081SPMS
10 Way	FDD101MS	
12 Way		FDD121SPMS
14 Way	FDD141MS	FDD141SPMS
16 Way	FDD161MS	FDD161SPMS
18 Way	FDD181MS	

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



Size:	80A Rating
	Product Code:
6 Way	FDR068AMS

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

AFDD/RCBO 6kA B and C Curve

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



Product ID:	Rating:	B or C:
AFDR06	06A	-
AFDR06	10A	-
AFDR06	16A	-
AFDR06	20A	-
AFDR06	25A	-
AFDR06	32A	-
AFDR06	40A	-
Example: AFDR06 06A B	Add code: 06A - 40A for Curve	Add code: B or C type

Technical Data for AFDD/RCBO:

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	A	Module Width	17.8mm /module
Residual Current Disconnection Time	≤0.1s	Torque N.m	2

eRCBO 1P 6kA & 10kA Compact B and C Curve

6A - 40A:
6kA & 10kA Type A B & C
Curve SP eRCBO



Product Code:	06 or 10:	Rating:	B or C:
CCPBR	--	06A	-
CCPBR	--	10A	-
CCPBR	--	16A	-
CCPBR	--	20A	-
CCPBR	--	25A	-
CCPBR	--	32A	-
CCPBR	--	40A	-
Example: CCPBR 06 20A B	Add code: 06 for 6kA 10 for 10kA	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,10kA	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	≤0.1s	Torque N.m	2

eRCBO 1P+N 6kA B and C Curve

6A - 40A:
6kA Type A B & C Curve
DP 1 Mod eRCBO



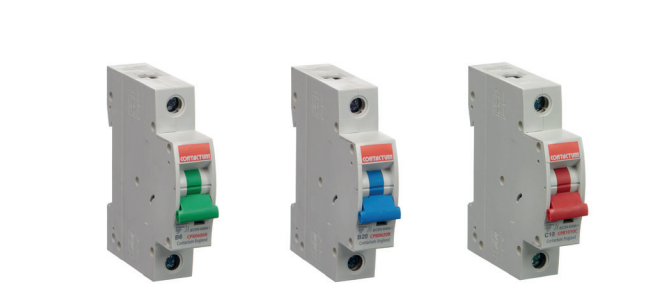
Rating:	Product Code:	B or C:
6A	CCPBR06061A	--
10A	CCPBR06101A	--
16A	CCPBR06161A	--
20A	CCPBR06201A	--
25A	CCPBR06251A	--
32A	CCPBR06321A	--
40A	CCPBR06401A	--
Example: CCPBR06061A B		Add code: B or C for Curve type

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	≤0.1s	Torque N.m	2

MCB 1P 6kA & 10kA B, C and D Curve

3A - 63A:
1P 6kA & 10kA
B, C & D Curve MCB



Product Code:	06 or 10:	Rating:	B, C or D:	
CPB	06	03	-	Only available in 6kA
CPB	--	06	-	
CPB	--	10	-	
CPB	--	16	-	
CPB	--	20	-	
CPB	--	25	-	
CPB	--	32	-	
CPB	--	40	-	
CPB	--	50	-	
CPB	--	63	-	
Example: CPB 06 03 B	Add code: 06 for 6kA 10 for 10kA		Add code: B, C or D for Curve type	

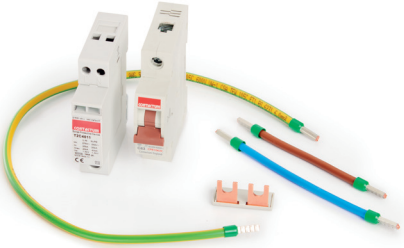
D Curve is only available in 10kA

Technical Data for MCB:

Standard	Confirming to IEC/BS EN60898-1	Number of poles	1P
Breaking capacity	6kA, 10kA	Type of trip	Thermal / magnetic release
Protection	Against overload and short circuit	Type of terminal	Lug type and Pin type
Rated current In	3, 6, 10, 16, 20, 25, 32, 40, 50, 63A	Terminal capacity	16mm2 flexible or 25mm2 rigid up to 25A ratings
Rated voltage	1pole 230 AC 50/60Hz, Rated insulation voltage Ui: 500V, Rated impulse withstand voltage Uimp: 6000V, Energy limiting class: 3	Protection degree	25mm2 flexible or 35mm2 rigid for 32A to 63A ratings
Ambient temperature	-5oC to +40oC pursuant to BS EN / IEC60898	Installation	IP20
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	Torque (N.m)	Mounting on 35mm DIN rail
		Width	2
			17.5mm per pole

Surge Arrestor

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



Product:	Product Code:
40kA	T2C4011KIT

Contactors



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
¼ Turn Camlock Accessory	DCA01
Key Lock Camlock Accessory	DCA02
Pack of 10 MCB/RCBO Toggle Locking Device (New Design)	DCA10
AMD3 Membrane Grommet Kit	DCA20
40/32mm Tails Red Kit Metal	DCA21
40/32mm Tails Red Kit Plastic	DCA22
2.5-50mm2 Earth Cable Connector	DCA26

Isolators



Product:	Product Code:
63A Double Pole Isolator	CPD63
Product:	Product Code:
100A Double Pole Isolator	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
Utilization category	AC-22A	Ambient temperature (oC)	-5oC to +40oC, Max.95% humidity
Icw	12Ie, t=0.1s	Storage temperature (oC)	-40~+75
Rated short-circuit making capacity Icn	20Ie, t=0.1s	Altitude (meters)	Max. 2,000
Rated making & breaking capacity	3Ie, 1.05Ie, COS =0.65	Protection degree	IP20
Rated insulation voltage Ui	690V	Installation	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

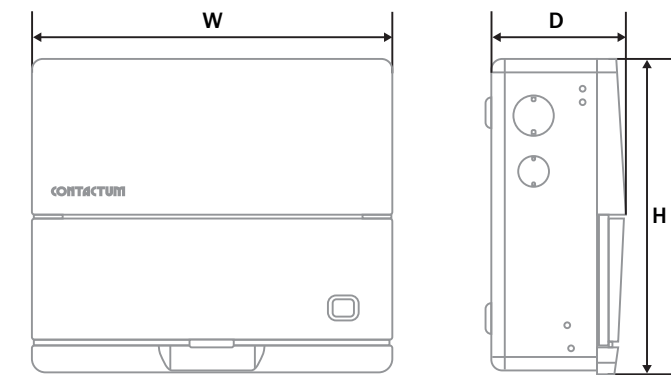
30mA and 100mA:
100A Type A
2 Pole RCD



Rating:	Product Code:
30mA	CPR63A
Rating:	Product Code:
30mA	CPR100A
100mA	CPR1010A
100mA + Time Delay	CPR1010AT

Technical Data for RCD:

Standard	Confirming to EN / IEC61008-1	Ambient temperature	-5oC to +40oC, Max. 95%humidity
Rated conditional short-circuit current, Inc	6kA	Residual current disconnection time	≤0.1s
Protection	Residual current	Rated residual current making & breaking Capacity, IΔm	500A for In=25,40A 630A for In=63,80,100
Type	A	Type of trip	Electro-magnetic release
Rated current, In	63, 100	Type of terminal	Lug type and Pin type
Number of poles	2(1+N)	Terminal capacity	Cables up to 35mm2
Rated sensitivity currents, I Δn	30,100mA	Protection degree	IP20
Rated residual non-operating current	0.5 X I Δn	Installation	35mm DIN rail
Rated impulse withstand voltage Uimp	6000V		
Rated voltages 2pole	230VAC		



Technical Data for Surface CU:

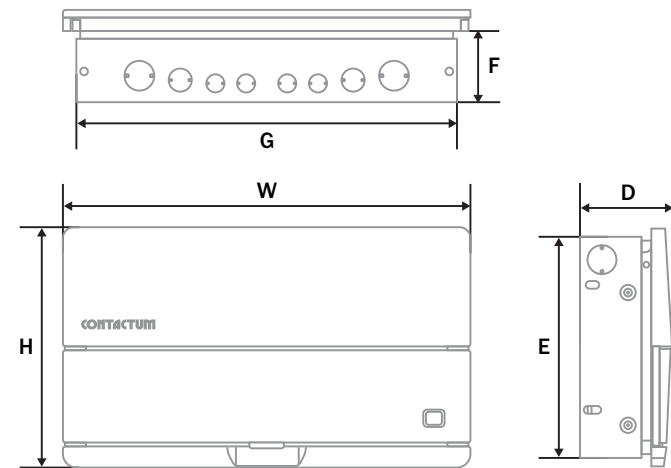
Standard	BS EN 61439-3:2012 Including Annex ZB (16kA)
Max Current Rating (InA) *	100A
Rated Operating Voltage (Ue)	230V AC 50Hz
Short Circuit Withstand (Icw)	10kA 0.1 sec
Poles	1
Cable Entry/Exit (KO's)	20, 25 & 32mm
Material	1.2mm Sheet Steel
IP Protection Rating	IP2XC/IP4X
Impact Rating	IK05
RAL Colour	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.

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	8 Mod	12 Mod	16 Mod	16 Mod	18 Mod	20 Mod	22 Mod	24 Mod	32 Mod	44 Mod
Height (H) mm	262	262	262	524	262	262	262	262	262	524	524
Width (W) mm	155	227	299	227	371	407	443	479	515	371	479
Depth (D) mm	114	114	114	114	114	114	114	114	114	114	114
Dual Row				DR						DR	DR



Technical Data for Flush CU:

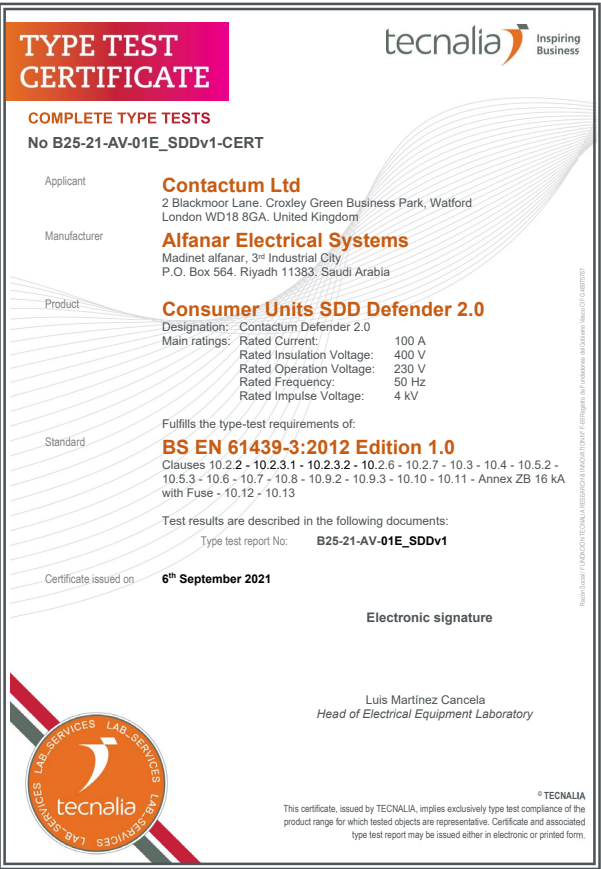
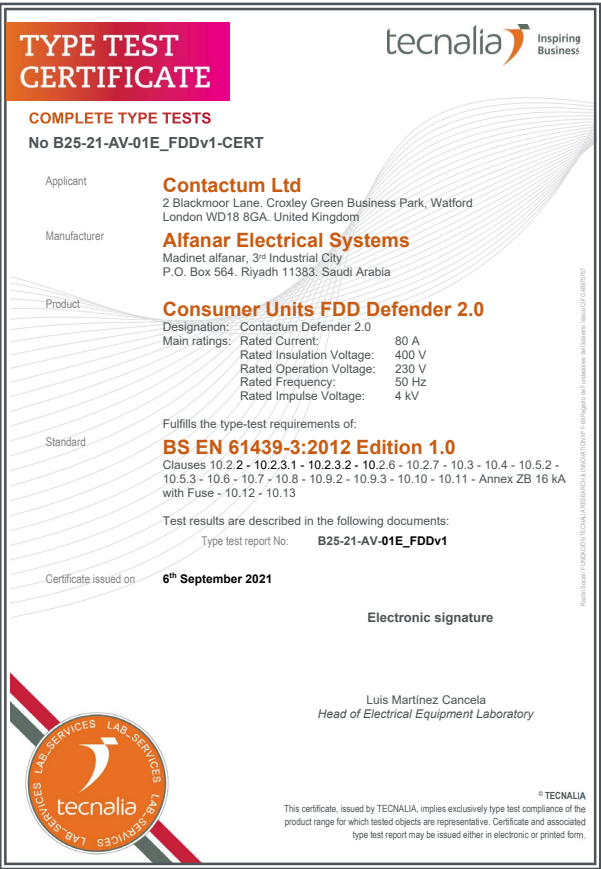
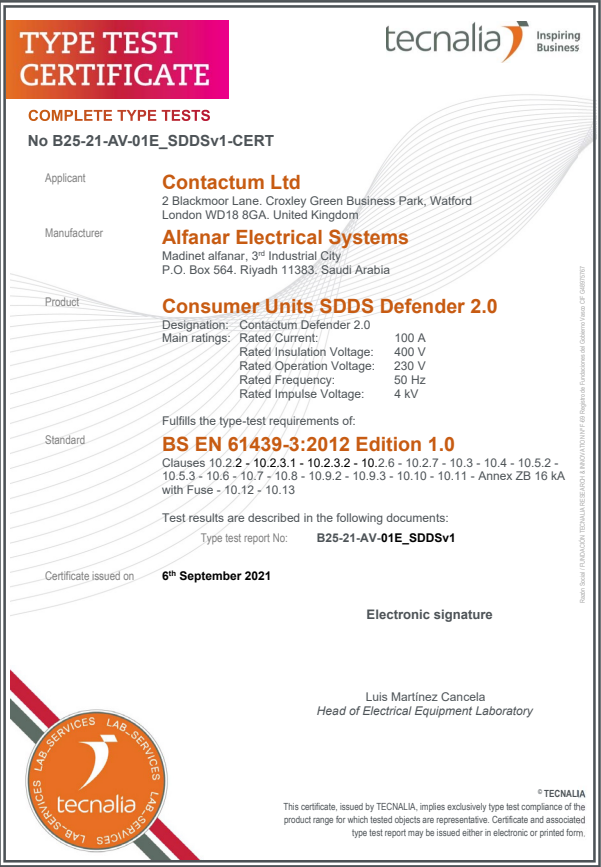
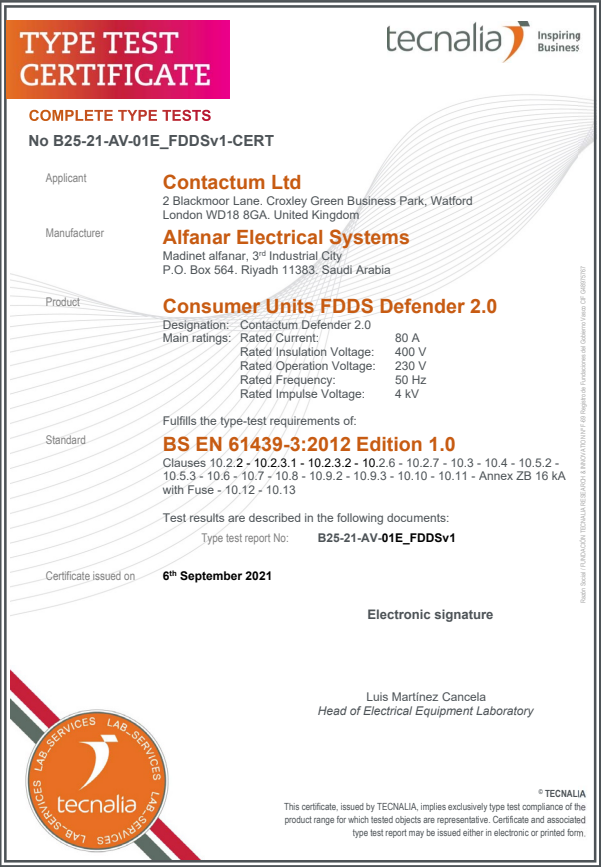
Standard	BS EN 61439-3: 2012 Including Annex ZB (16kA))
Max Current Rating (InA) *	100A
Rated Operating Voltage (Ue)	230V AC 50Hz
Short Circuit Withstand (Icw)	10kA 0.1 sec
Poles	1
Cable Entry/Exit (KO's)	20, 25 & 32mm
Material	1.2mm Sheet Steel
IP Protection Rating	IP2XC/IP4X
Impact Rating	IK05
RAL Colour	9016
Fixing	Flush
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 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	12 Mod	16 Mod	16 Mod	18 Mod	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





DEFENDER

2.0



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