LOAD *Pro*
Consumer Units

DORMAN SMITH
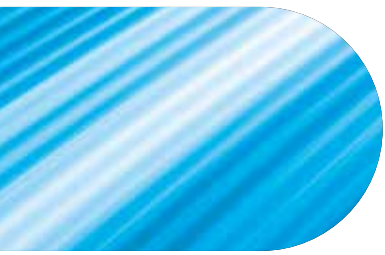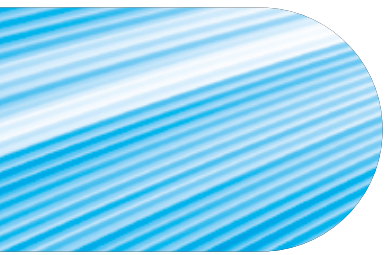
Dorman Smith
Switchgear Limited

With over 130 years of experience in switchgear design and production Dorman Smith Switchgear Limited continues to provide high quality equipment for low-voltage electrical distribution and circuit protection.

Our product range begins with single-pole and neutral distribution board systems and continues up to custom designed, factory built low-voltage electrical switchboards for a broad range of commercial, industrial and retrofit applications.

We continue to build on our extensive technical knowledge and awareness of customer and market demands, operating conditions and current regulations.

This breadth of experience supports the development and manufacturing techniques of our electrical products to exceed the industry standards.

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DORMAN SMITH

LOAD *Pro*
Consumer Units

Key Features

The Dorman Smith new LoadPro range of Consumer Units is designed to meet the requirements of Amendment No. 3 to BS 7671 and can accommodate the additional metering and surge protection requirements associated with the introduction of the 18th Edition of the Wiring Regulations.

The LoadPro Consumer Unit range features five different types of board with a variety of factory fitted incoming options, phase and neutral wiring already installed and the options of purchasing as individual products or as a bespoke factory built assembly.

With an all metal construction, including stay close lid and metal hinges, the Load-Pro Consumer Units are suitable for both domestic and light commercial / industrial applications.

All Consumer Units have cable knockouts in the top, bottom, sides and rear for ease of installation for incoming and outgoing cabling.

The flexible comb busbar also allows for modular devices such as; meters, surge protection, timers and contactors to be installed integral to the board in the unused outgoing ways.

The standard paint finish is epoxy powder coating Traffic White RAL9016 which gives the LoadPro Consumer Units a clean aesthetic style.

Busbar
All LoadPro Consumer Units are supplied with a 100A rated comb busbar.

Compliance
Consumer Units	BS EN 61439-3
Switch Disconnector	BS EN 60947-3
RCCB	BS EN 61008
MCB	BS EN 60898
RCBO	BS EN 61009

Standard Board Types
Complete with either:

• 100A 2-Pole Switch Disconnector
• 80A 30mA 2-Pole RCCB

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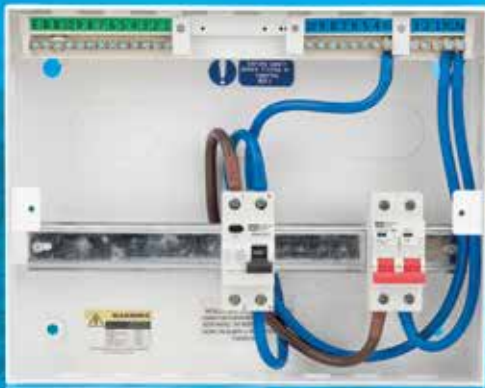
Split Board Types

Complete with either:

- 100A 2-Pole Switch Disconnector and single 80A 30mA RCCB
- 100A 2-Pole Switch Disconnector and dual 80A 30mA 2-Pole RCCBs
- High Integrity version is also available

Outgoing Single Pole Ways

The LoadPro Consumer Units are available from 2 to 20 outgoing single pole ways, depending on board type.

Outgoing Devices

The LoadPro Consumer Units are designed to house the new CU Series of outgoing devices as below:

- 6kA 1-Pole MCBs
- 6kA -Pole RCBOs

Factory Built Assemblies

Dorman Smith are able to offer a vast range of options for pre-populated and factory built assemblies with multi-function and MID metering and surge suppression devices. Please speak with your local Key Account Manager for more information and a bespoke quotation to meet your needs.

Surge Suppression

Type II Class II surge suppression device is available with plug-in modules for the live and earth/neutral phases. This is in a 2-module wide design and can be fitted integral to the board.

Metering

The LoadPro Consumer Unit product range also includes a compact 100A direct connection multi-function and MID meter with pulse and Modbus communication as standard. This will meet the growing requirement for energy monitoring and the meter fits integral to the board.

OVER 130 YEARS OF ELECTRICAL EXCELLENCE

LOAD **Pro** Consumer Units
Standard Boards

Switch Disconnector Incomer

Key Features

- Amendment 3 Compliant metal consumer unit
- Complete with SP&N 100A switch disconnector
- Meets the requirements of BS EN 61439-3
- Busbar rated at 100A
- Neutral and earth terminal for each outgoing 1-pole way
- Available in 2 - 20, 1-pole outgoing ways
- Suitable for CU Series 6kA 1-pole MCBs and RCBOs
- IP3X Ingress Protection
- Height is 260mm and overall depth is 116mm. Width as per table below.
- Pre-populated and Factory Built Assembly options available. Please contact your Key Account Manager for more information.

Outgoing 1-pole Ways	Width (mm)	Weight (kg)	Product Code
2	150	1.90	CU02SWD
6	220	2.80	CU06SWD
12	330	3.75	CU12SWD
16	405	4.55	CU16SWD
20	475	4.70	CU20SWD

RCCB Incomer

Key Features

- Amendment 3 Compliant metal consumer unit
- Complete with 2-Pole 80A 30mA RCCB
- Meets the requirements of BS EN 61439-3
- Busbar rated at 100A
- Neutral and earth terminal for each outgoing 1-pole way
- Available in 6 - 20, 1-pole outgoing ways
- Suitable for CU Series 6kA 1-pole MCBs
- IP3X Ingress Protection
- Height is 260mm and overall depth is 116mm. Width as per table below.
- Pre-populated and Factory Built Assembly options available. Please contact your Key Account Manager for more information.

Outgoing 1-pole Ways	Width (mm)	Weight (kg)	Product Code
6	220	2.85	CU06RCCB
12	330	3.80	CU12RCCB
16	405	4.60	CU16RCCB
20	475	4.75	CU20RCCB

Single RCCB Boards

Key Features

- Amendment 3 Compliant metal consumer unit
- Complete with SP&N 100A switch disconnector and single 2-Pole 80A 30mA RCCB
- Meets the requirements of BS EN 61439-3
- Busbar rated at 100A
- Neutral and earth terminal for each outgoing 1-pole way
- Available in three different MCB / RCBO combinations
- Suitable for 6kA 1-pole MCBs and RCBOs
- IP3X Ingress Protection
- Height is 260mm and overall depth is 116mm. Width as per table below.
- Pre-populated and Factory Built Assembly options available. Please contact your Key Account Manager for more information.

No. of 1-pole Protected Ways	No. of 1-pole Independent Ways	Width (mm)	Weight (kg)	Product Code
7	3	330	4.00	CU73RCCB80
9	5	405	4.80	CU95RCCB80
12	6	475	4.95	CU126RCCB80

Dual RCCB Boards

Key Features

- Amendment 3 Compliant metal consumer unit
- Complete with SP&N 100A switch disconnector and dual 2-Pole 80A 30mA RCCBs
- Meets the requirements of BS EN 61439-3
- Busbar rated at 100A
- Neutral and earth terminal for each outgoing 1-pole way
- Available in 4&4 or 6&6 or 8&8, 1-pole outgoing ways
- Suitable for CU Series 6kA 1-pole MCBs
- IP3X Ingress Protection
- Height is 260mm and overall depth is 116mm. Width as per table below.
- Pre-populated and Factory Built Assembly options available. Please contact your Key Account Manager for more information.

Outgoing 1-pole Ways	Width (mm)	Weight (kg)	Product Code
4 & 4	330	4.20	CU44RCCB280
6 & 6	405	5.00	CU66RCCB280
8 & 8	475	5.15	CU88RCCB280

High Integrity Board

Key Features

- Amendment 3 Compliant metal consumer unit
- Complete with SP&N 100A switch disconnector and dual 2-Pole 80A 30mA RCCBs
- Meets the requirements of BS EN 61439-3
- Busbar rated at 100A
- Neutral and earth terminal for each outgoing 1-pole way
- Available in a 5+5+2, 1-pole outgoing way format
- Suitable for CU Series 6kA 1-pole MCBs and RCBOs
- IP3X Ingress Protection
- Height is 260mm and overall depth is 116mm. Width as per table below.
- Pre-populated option available. Please contact your Key Account Manager for more information.

Outgoing 1-pole Ways	Width (mm)	Weight (kg)	Product Code
5 & 5 & 2	405	5.00	CU552HI

LOAD **Pro** Consumer Units

Incoming Devices & Accessories

Switch Disconnector

Key Features

- Supplied with Consumer Unit Boards
- Meets the requirements of BS EN 60947-3
- Maximum cable termination is 50mm²
- Utilisation category is AC22A
- Maximum torque for terminals is 2.5Nm
- Operational voltage 415V
- Frequency 50/60 Hz

Current Rating (A)	No. of Poles	Product Code
100	2	CV2P100

RCCB

Key Features

- Supplied with Consumer Unit Boards
- Meets the requirements of BS EN 61008
- Maximum cable termination is 35mm²
- Type AC
- Double pole
- Maximum torque for terminals is 2.5Nm
- Operational voltage 240V
- Frequency 50 Hz

Current Rating (A)	Sensitivity (mA)	No. of Poles	Product Code
63	30	2	CE60/30/2
80	30	2	CE80/30/2

Modular Contactors

Main Features

- Exceeds the requirements of EN 61095
- May require de-rating when used with inductive loads - please see Contactor de-rating table in the Technical Data catalogue for further information

Current Rating (A)	No. of Poles	Width (mm)	Contact Status	Product Code
20	2	17.5	Normally Open	EE2P20CO
20	2	17.5	Normally Closed	EE2P20CC
Ventilation Kit	-	9	-	LLMV *

*Ventilation module must be fitted between alternate pairs of contactors to prevent overheating.

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Single Pole MCBs

Key Features

- Meets the requirements of EN 60898
- 6kA rated breaking capacity
- Contact position indicator
- Maximum cable termination is 16mm²
- Operational voltage is 240V
- Frequency 50/60 Hz

| Current Rating (A)	6kA MCBs	
	B Type Product Code	C Type Product Code
6	CS1PB06	CS1PC06
10	CS1PB10	CS1PC10
16	CS1PB16	CS1PC16
20	CS1PB20	CS1PC20
32	CS1PB32	CS1PC32
40	CS1PB40	CS1PC40
50	CS1PB50	CS1PC50
63	CS1PB63	CS1PC63

Single Pole RCBOs

Key Features

- Meets the requirements of EN 61009
- 6kA rated breaking capacity
- Contact position indicator
- RCBO Type: AC
- Maximum cable termination is 16mm²
- Operational voltage is 240V
- Frequency 50/60 Hz

Current Rating (A)	6kA RCBOs	
	B Type Product Code	C Type Product Code
6	CR1PSB0630	CR1PSC0630
10	CR1PSB1030	CR1PSC1030
16	CR1PSB1630	CR1PSC1630
20	CR1PSB2030	CR1PSC2030
32	CR1PSB3230	CR1PSC3230
40	CR1PSB4030	CR1PSC4030
50	CR1PSB5030	CR1PSC5030

Consumer Unit Board Accessories

Description	Product Code
LoadPro Blanking Kit (containing 6 x front shield blanks and 5 x terminal blanks)	CUBL4
LoadPro spare busbar (22 ways - 20 x useable plus 2 x incomer)	CUBAR
LoadPro Consumer Unit Fixing Kit (containing; Installation Instructions, labels and blanks)	CUKIT
LoadPro Consumer Unit spare earth / neutral bar for up to 23 ways	CUENBAR
MCB and RCBO Dolly locking device	KDL
Padlock for KDL Dolly locking device	XPL

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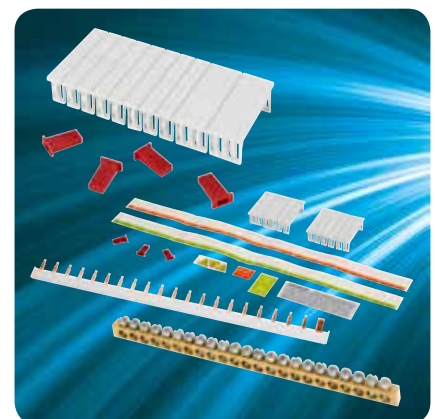
LOAD Pro
Consumer Units
Metering and Surge
Suppression

Metering

Key Features

- Suitable for single-phase applications
- 100A Direct Connection DIN-rail meters
- Multi-function and MID B & D Certified options available
- Built in pulse and Modbus communication
- Import and Export active energy
- Can be mounted integral to the Consumer Unit
- Maximum cable termination is 35mm

Current Rating (A)	Width (mm)	Meter Type	Product Code
100	36	Multi Function	AP15-1DO
100	36	MID	AP25-1DO

Surge Protection

Key Features

- Type 2 Class 2 TVSS device
- Plug-in surge protection modules
- Tested to withstand 8/20mS waveforms
- Integral protection status indicator
- Operating range 200-300V rms maximum
- Modules are replaceable as required
- Maximum cable termination is 35mm²
- Can be mounted integral to the Consumer Unit

Device Type	Product Code
Single Pole and Neutral/Earth protection	DSPM1PN
MOV replacement phase plug-in module	DSPML
MOV replacement Neutral/Earth plug-in module	DSPMNE

NOTE: It is recommended that surge protection devices are fed by a 63A Type C MCB to provide isolation and protection.

Modular Programmable Timer

Main Features

- 1 or 2 Channel
- Daily / Weekly programming options of up to 30 events per channel
- Maximum rating at 16A
- Backlit LCD easy read display
- Terminal ratings at IP20

Current Rating (A)	Width (mm)	Product Code
16A (AC7A)	35	DRT-DW2

OVER 130 YEARS OF ELECTRICAL EXCELLENCE

Board Product Code	CU02SWD	CU06SWD CU06RCCB	CU12SWD CU12RCCB CU44RCCB280 CU73RCCB80	CU16SWD CU16RCCB CU66RCCB280 CU95RCCB80 CU552HI	CU20SWD CU20RCCB CU88RCCB280 CU126RCCB80
Knockout Shape and Size	**Quantity**	**Quantity**	**Quantity**	**Quantity**	**Quantity**
Ø32	1 x Each Side	1 x Each Side	1 x Each Side	1 x Each Side	1 x Each Side
Ø25	1 x Each Side 2 x Top 2 x Bottom	1 x Each Side 2 x Top 2 x Bottom	1 x Each Side 2 x Top 2 x Bottom	1 x Each Side 2 x Top 2 x Bottom	1 x Each Side 2 x Top 2 x Bottom
Ø20	1 x Top 1 x Bottom	3 x Top 3 x Bottom	6 x Top 6 x Bottom	8 x Top 8 x Bottom	10 x Top 10 x Bottom
65 x 40mm	1 x Rear	1 x Rear	3 x Rear	3 x Rear	4 x Rear

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