



Dorman Smith Loadlimiter 63 SP&N Distribution System

SP&N Distribution Systems

Loadlimiter 63 Range of SP&N Distribution Systems (A-type)



Overview

Key Features

- Distribution board has 125A rated busbars
- Distribution boards can be stacked
- Choice of switch disconnecter or RCCB incomer
- Boards have standard height (250mm) and depth (116mm)

Available Options

- Distribution boards provide from 6 to 22 outgoing ways
- Incomer can be double-pole switch disconnecter up to 125A or double-pole RCCB up to 100A
- Outgoing ways can be configured with 10kA-rated MCBs or RCBOs
- Matching service centres equipped with 8 to 24 modular ways

Additional Features

- Single module shunt trip and auxiliary contacts easily fitted to MCBs
- Neutral and earth terminal for each single-pole way
- IP4X Ingress Protection

Compliance

Distribution boards	EN 60439-3
MCBs	EN 60898
Contactors	EN 61095
RCBOs	EN 61009
RCCBs	EN 61008

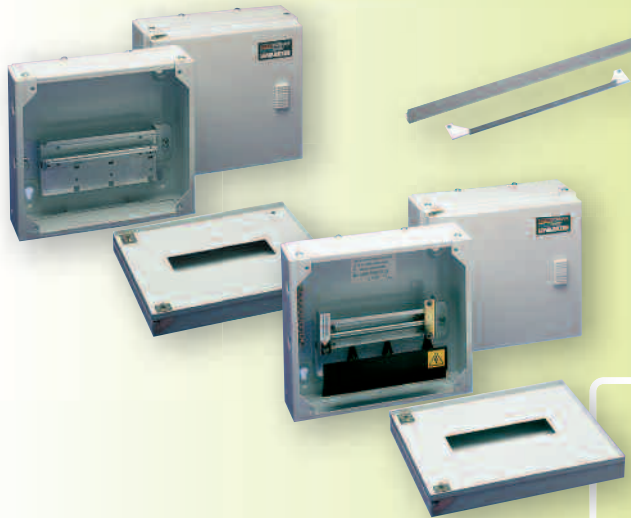
The Dorman Smith Loadlimiter 63 distribution system includes a versatile range of MCB distribution boards and components for constructing comprehensive SP&N circuit management solutions. The system is designed for applications demanding up to 125A incoming and 63A outgoing capacity and the distribution board exceeds the requirements of EN 60439-3.

The array of circuit devices includes an extensive range of MCBs, RCBOs, RCCBs and switch disconnectors. The system ensures simple configuration and quick installation as demanded by today's new and retrofit, commercial and industrial applications.

The standard finish is epoxy powder coating in light grey RAL 7035.



SP&N Distribution System

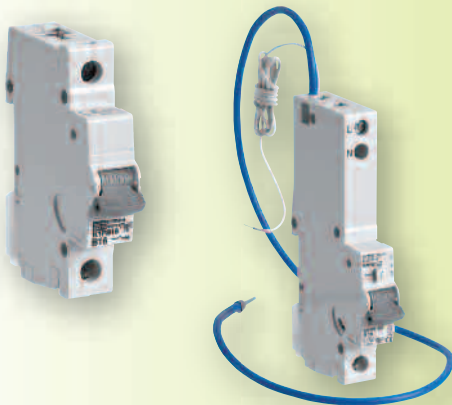


A-type Distribution Boards

- Service centres
- Stacking kits

Incoming Devices

- Switch disconnectors
- Residual current circuit breakers - RCCB



Circuit Protection Devices

- Miniature circuit breakers
- Residual current circuit breaker with overcurrent protection - RCBO
- Residual current circuit breakers - RCCB

Modular Devices

- Surge protection
- Metering
- Contactors
- Timer
- Residual current circuit breaker



Loadlimiter 63

A-type Distribution Boards and Accessories



A-type Distribution Boards

- Exceeds the requirements of EN 60439-1
- 125A rated
- Neutral and earth terminal for each single-pole way
- 6-22 single-pole outgoing ways
- IP4X Ingress Protection

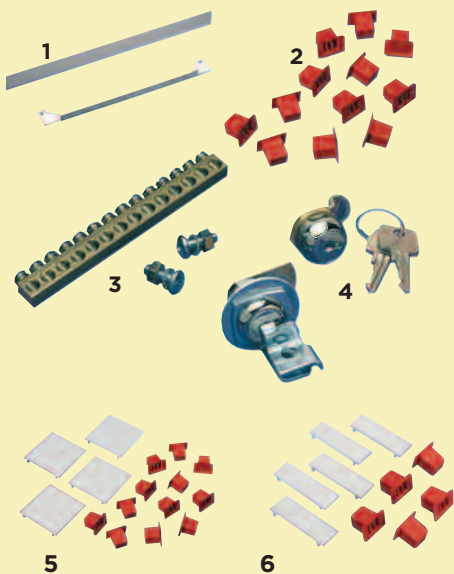
Outgoing 1-pole ways	Width (mm)	Weight (kg)	Cat. no.
6	270	3.8	DA06X
9	323	4.3	DA09X
12	377	4.8	DA12X
15	430	5.3	DA15X
18	484	6.0	DA18X
22	555	7.0	DA22X



A-type Service Centre

- Accepts all DIN-rail mounting devices
- 8-24 modular ways
- IP4X Ingress Protection

Modular ways	Width (mm)	Weight (kg)	Cat. no.
8	270	3.8	DAS08X
11	323	4.3	DAS11X
14	377	4.8	DAS14X
17	430	5.3	DAS17X
20	484	6.0	DAS20X
24	555	7.0	DAS24X



Accessories for A-type Distribution Boards

Description	Picture	Cat. no.
Vertical stacking kits		
Stacking kit for 270mm width	1	DAXSK08
Stacking kit for 323mm width	1	DAXSK11
Stacking kit for 377mm width	1	DAXSK14
Stacking kit for 430mm width	1	DAXSK17
Stacking kit for 484mm width	1	DAXSK20
Stacking kit for 555mm width	1	DAXSK24
Earth bar kits		
Earth bar	3	DAXEB
Earth bar isolation kit	3	DBXL
Door lock kits		
Cylinder door lock	4	DBXCL
Padlock bracket kit	4	DBXPL
Blanking kits		
10 busbar terminal blanks	2	DAXTP
MCB blanks		
4xTP MCB + 12 busbar terminal blanks	5	DBXBP
5xJP MCB + 5 busbar terminal blanks	6	DBXBM
5x/2 MCB blanks	-	DBXBH

Loadlimiter 63

A-type Distribution Boards Incoming Options

Switch Disconnecter

- Exceeds the requirements of EN 60947-3
- 50mm² cable capacity
- Duty category of AC22

Incoming device type	Current rating (A)	Poles	Max. cable (mm ²)	Cat. no.
Switch disconnecter	100	2	50	AV2100
Switch disconnecter	125	2	50	AV2125

Double-pole RCCB

- Exceeds the requirements of EN 61008
- Equipped with transient suppression filter
- Voltage 230/400V 50/60 Hz
- Double module for both type AC
- Terminal capacity: top 25mm²
- Terminal capacity: bottom 35mm²

Incoming device type	Current rating (A)	Sensitivity (mA)	Device type	Cat. no.
RCCB	63	30	AC	EE63/30/2
RCCB	63	100	AC	EE63/100/2
RCCB	63	300	AC	EE63/300/2
RCCB	80	30	AC	EE80/30/2
RCCB	100	30	AC	EE100/30/2
RCCB	100	100	AC	EE100/100/2
RCCB time delay	100	100	AC	EES100/100/2

Direct Connection

Incoming device type	Max. cable (mm ²)	Pic number	Cat. no.
Direct connection	35	1	DBXD0
Direct connection	70	2	DAXD1

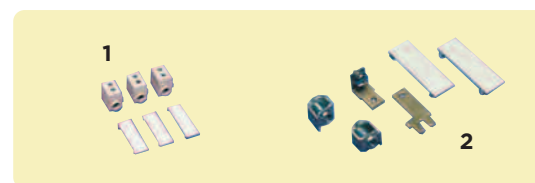
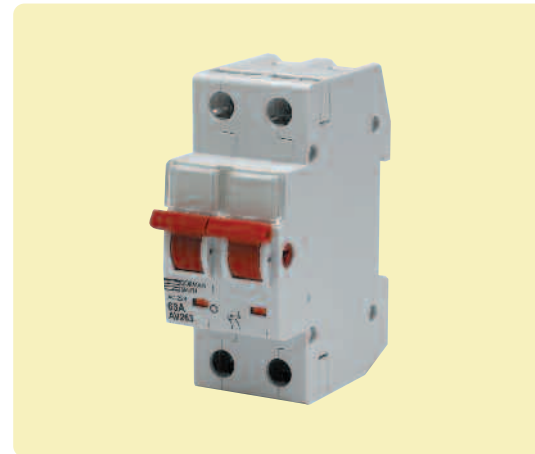
Surge Protection

- Plug-in surge protection modules
- Integral protection status indicator
- Operating range 200-300V rms max
- 'Hot working' replaceable modules
- Terminals 35mm² max

See page 116 for more information.

Device type	Cat. no.
SP + NE surge protection	DSPM1PN
MOV replacement plug-in module	DSPML
MOV neutral/earth replacement plug-in module	DSPMNE

Note: It is recommended that SPM surge protectors are installed on the load side of a MCB - type C, MCCB or a fused disconnecter 63A to provide isolation and protection.



Loadlimiter 63

A-type Outgoing Devices

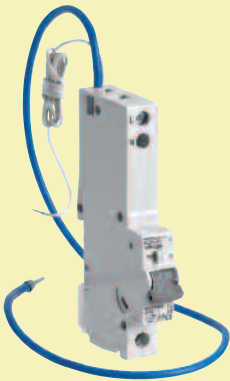


Single-pole MCBs

- Exceeds the requirements of EN 60898
- 10kA rated breaking capacity to EN 60898
- 15kA rated breaking capacity to EN60947-2
- Contact position indicator
- 35mm² cable capacity

Current rating (A)	B type cat. no.	C type cat. no.	D type cat. no.
6	K1PB06	K1PC06	K1PD06
10	K1PB10	K1PC10	K1PD10
13	K1PB13	K1PC13	-
16	K1PB16	K1PC16	K1PD16
20	K1PB20	K1PC20	K1PD20
25	K1PB25	K1PC25	K1PD25
32	K1PB32	K1PC32	K1PD32
40	K1PB40	K1PC40	T1PD40*
50	K1PB50	K1PC50	T1PD50*
63	K1PB63	K1PC63	T1PD63*

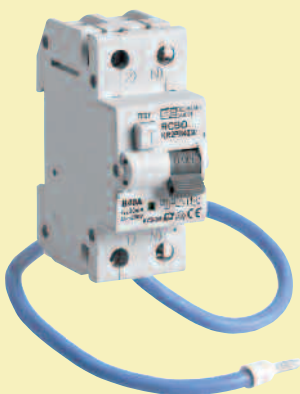
* 6kA/10kA - EN60898/EN60947-2



Single Module RCBOs

- Exceeds the requirements of EN 61009
- Single module: type AC
- 10kA rated breaking capacity
- Terminal capacity: top terminals 10mm²
- Terminal capacity: bottom terminals 35mm²

Current rating (A)	Sensitivity (mA)	B type cat. no.	C type cat. no.
6	30	KR1PB0630	KR1PC0630
10	30	KR1PB1030	KR1PC1030
16	30	KR1PB1630	KR1PC1630
20	30	KR1PB2030	KR1PC2030
32	30	KR1PB3230	KR1PC3230
40	30	KR1PB4030	KR1PC4030
45	30	KR1PB4530	KR1PC4530
6	100	-	KR1PC06100
10	100	-	KR1PC10100
16	100	-	KR1PC16100
20	100	-	KR1PC20100
32	100	-	KR1PC32100
40	100	-	KR1PC40100



Double Module RCBOs

- Exceeds the requirements of EN 61009, IEC 61009
- SP&SwN configuration
- Rated breaking capacity up to 10kA
- Contact position indicator
- Rated voltage U_e ~230V
- Rated frequency 50Hz
- Energy limiting class 3
- Type AC
- Terminal capacity: outgoing terminals 35mm²
- Terminal capacity: busbar side terminals 35mm²

Current rating (A)	Sensitivity (mA)	B type cat. no.	C type cat. no.
6	30	KR2PB0630	KR2PC0630
10	30	KR2PB1030	KR2PC1030
16	30	KR2PB1630	KR2PC1630
20	30	KR2PB2030	KR2PC2030
32	30	KR2PB3230	KR2PC3230
40	30	KR2PB4030	KR2PC4030

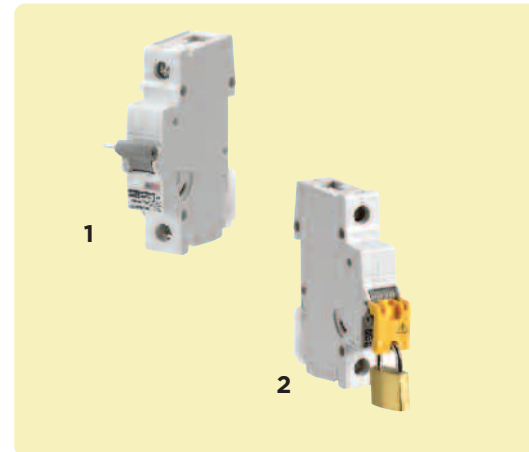
Loadlimiter 63

A-type Metering and Accessories

Accessories for MCBs and RCBOs

Auxiliary equipment	Picture	Cat. no.
MCB shunt trip (240V AC)	1	KST240
MCB auxiliary/switching contact		KAUX1

Padlocking	Picture	Cat. no.
MCB dolly locking device	2	KDL
Padlock for dolly locking device		XPL



DIN-rail Mounted Meters

- DIN-rail mountable in Loadlimiter 63 service centres

Device type	Outputs	Width (mm)	Cat. no.
3-phase analogue kWh meter	1 pulse	71	DRK-3PCT-415
3-phase digital kWh meter	1 pulse	71	DRK-3PCT-415-LCD
1-phase/3-phase digital multi-function meter	1 pulse & 1 modbus	71	RI3-01
1-phase digital kWh meter with integral 63A current transformer	1 pulse	54	DRK-1P-230-D63



Measuring Current Transformers

- System voltage up to 720V
- Secondary output of 5A
- Operating temperature range of -20°C to +70°C

Description	Cable aperture (mm)	Height (mm)	Width (mm)	Cat. no.
100A current transformer	25	65	45	M53Q-100/5
125A current transformer	25	65	45	M53Q-125/5
DIN-rail clip	-	-	-	M30-DINCLIP



Loadlimiter 63 Selection Chart - A-type

Distribution Boards

Busbar rating	Outgoing ways	Width (mm)	Weight (kg)	Cat. no.
125A	6	270	3.8	DA06X
125A	9	323	4.3	DA09X
125A	12	377	4.8	DA12X
125A	15	430	5.3	DA15X
125A	18	484	6.0	DA18X
125A	22	555	7.0	DA22X

Service Centres

For DIN-rail modules	Modular ways			
Service centre	8	270	3.8	DAS08X
Service centre	11	323	4.3	DAS11X
Service centre	14	377	4.8	DAS14X
Service centre	17	430	5.3	DAS17X
Service centre	20	484	6.0	DAS20X
Service centre	24	555	7.0	DAS24X

Incoming Devices

Device type	Current rating (A)	Sensitivity (mA)	Max. cable (mm ²)	
Switch disconnecter	100	-	50	AV2100
Switch disconnecter	125	-	50	AV2125
RCCB, type AC	63	30	35	EE63/30/2
RCCB, type AC	63	100	35	EE63/100/2
RCCB, type AC	63	300	35	EE63/300/2
RCCB, type AC	80	30	35	EE80/30/2
RCCB, type AC	100	30	35	EE100/30/2
RCCB, type AC	100	100	35	EE100/100/2
RCCB type AC time delay	100	100	35	EES100/100/2
Direct connection	-	-	35	DBXD0
Direct connection	-	-	70	DAXD1

Surge Protection

SP + NE surge protection	DSPM1PN
MOV replacement plug-in module	DSPML
MOV neutral/earth replacement plug-in module	DSPMNE

Accessories for DA Type Distribution Boards

Vertical stacking kits	
Stacking kit for 270mm width	DAXSK08
Stacking kit for 323mm width	DAXSK11
Stacking kit for 377mm width	DAXSK14
Stacking kit for 430mm width	DAXSK17
Stacking kit for 484mm width	DAXSK20
Stacking kit for 555mm width	DAXSK24
Blanking kits	
Busbar terminal blanks (set of 10)	DAXTP
Earth bar kits	
Earth bar	DAXEB
Earth bar isolation kit	DBXL
Door lock kits	
Cylinder door lock	DBXCL
Padlock bracket kit	DBXPL

Loadlimiter 63 Selection Chart - A-type

SP&N MCBs - B, C & D types				
10kA/15kA breaking capacity	Current rating (A)	B type cat. no.	C type cat. no.	D type cat. no.
1-pole	6	K1PB06	K1PC06	K1PD06
1-pole	10	K1PB10	K1PC10	K1PD10
1-pole	13	K1PB13	K1PC13	K1PD13
1-pole	16	K1PB16	K1PC16	K1PD16
1-pole	20	K1PB20	K1PC20	K1PD20
1-pole	25	K1PB25	K1PC25	K1PD25
1-pole	32	K1PB32	K1PC32	K1PD32
1-pole	40	K1PB40	K1PC40	T1PD40*
1-pole	50	K1PB50	K1PC50	T1PD50*
1-pole	63	K1PB63	K1PC63	T1PD63*

6kA/10kA - EN60898/EN60947-2

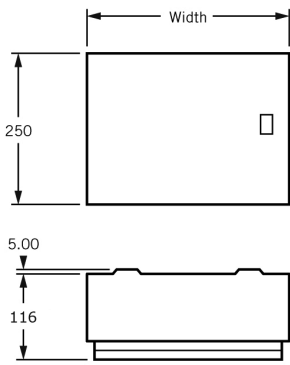
SP&N RCBOs - B & C types				
10kA breaking capacity Device type	Current rating (A)	Sensitivity (mA)	B type cat. no.	C type cat. no.
Single module, type AC	6	30	KRIPB0630	KRIPC0630
Single module, type AC	10	30	KRIPB1030	KRIPC1030
Single module, type AC	16	30	KRIPB1630	KRIPC1630
Single module, type AC	20	30	KRIPB2030	KRIPC2030
Single module, type AC	32	30	KRIPB3230	KRIPC3230
Single module, type AC	40	30	KRIPB4030	KRIPC4030
Single module, type AC	45	30	KRIPB4530	KRIPC4530
Single module, type AC	6	100	-	KRIPC06100
Single module, type AC	10	100	-	KRIPC10100
Single module, type AC	16	100	-	KRIPC16100
Single module, type AC	20	100	-	KRIPC20100
Single module, type AC	32	100	-	KRIPC32100
Single module, type AC	40	100	-	KRIPC40100

Accessories for MCBs and RCBOs	
Description	Cat. no.
Auxiliary equipment	
MCB shunt trip (240V ac)	KST240
MCB auxiliary/switching contact	KAUX1
Padlocking	
MCB dolly locking device	KDL
Padlock for dolly locking device	XPL
Blanking pieces	
MCB blanks (4xTP MCB ways + 12 busbar terminal blanks)	DBXBP
MCB blanks (5xSP MCB ways + 5 busbar terminal blanks)	DBXBM
MCB blanks (5x/2 MCB ways)	DBXBH

Metering			
Description	Outputs	Width (mm)	Cat. no.
3-phase analogue kWh meter	1 pulse	71	DRK-3PCT-415
3-phase digital kWh meter	1 pulse	71	DRK-3PCT-415-LCD
1-phase/3-phase digital multi-function meter	1 pulse & 1 modbus	71	RI3-01
1-phase digital kWh meter with integral 63A current transformer	1 pulse	54	DRK-1P-230-D63
Current transformer, 100A	-	-	M53Q-100/5
Current transformer, 125A	-	-	M53Q-125/5

Loadlimiter 63

Outline Drawings and Dimensions



All dimensions in mm

A-type Distribution Boards

1-pole ways	Width (mm)	Weight (kg)	Cat. no.
6	270	3.8	DA06X
9	323	4.3	DA09X
12	377	4.8	DA12X
15	430	5.3	DA15X
18	484	6.0	DA18X
22	555	7.0	DA22X

A-type Service Centres

Modular ways	Width (mm)	Weight (kg)	Cat. no.
8	270	3.8	DAS08X
11	323	4.3	DAS11X
14	377	4.8	DAS14X
17	430	5.3	DAS17X
20	484	6.0	DAS20X
24	555	7.0	DAS24X

About TE Connectivity

TE Connectivity is a global, \$12.1 billion company that designs and manufactures over 500,000 products that connect and protect the flow of power and data inside the products that touch every aspect of our lives. Our nearly 100,000 employees partner with customers in virtually every industry – from consumer electronics, energy and healthcare, to automotive, aerospace and communication networks – enabling smarter, faster, better technologies to connect products to possibilities.

While TE has made every reasonable effort to ensure the accuracy of the information in this catalog, TE does not guarantee that it is error-free, nor does TE make any other representation, warranty or guarantee that the information is accurate, correct, reliable or current. TE reserves the right to make any adjustments to the information contained herein at any time without notice. TE expressly disclaims all implied warranties regarding the information contained herein, including, but not limited to, any implied warranties of merchantability or fitness for a particular purpose. The dimensions in this catalog are for reference purposes only and are subject to change without notice. Specifications are subject to change without notice. Consult TE for the latest dimensions and design specifications. Dorman Smith three line logo, Integra, Loadline, TE connectivity (logo) and TE Connectivity are trademarks of the TE Connectivity Ltd. family of companies. Crompton is a trademark of Crompton Parkinson and is used by TE Connectivity Ltd. under a licence. Other logos, product and Company names mentioned herein may be trademarks of their respective owners.

TE Energy - innovative and economical solutions for the electrical power industry: cable accessories, connectors & fittings, insulators & insulation, surge arresters, switching equipment, street lighting, power measurement and control.

Tyco Electronics UK Ltd

TE Energy
Freebournes Road
Witham, Essex CM8 3AH

Phone: +44 (0)870 870 7500
Fax: +44 (0)870 240 5289
Email: dormansmithswitchgear@te.com
E-fax: +44 (0)1793 602431

www.dormansmithswitchgear.com
www.energy.te.com

