

### Technical Specifications

Panelboards are available in a wide range of configurations giving solutions to applications from 100A to 630A. Flexibility is designed into the product by use of a modular construction. Panelboards are housed in electro-galvanised steel enclosures and finished in a grey epoxy-powder paint giving excellent corrosion resistance. Busbars are produced from high conductivity copper and are tin plated as standard. All unpainted steel components are zinc plated with full chromate passivation for corrosion resistance. Meterpacks and extension boxes are available.

- 100A, 200A, 250A, 400A, 630A panelboard versions available
- 3 to 18 outgoing ways
- Outgoing MCCBs up to 250A
- Type tested and KEMA certified
- IP3X construction (Higher IP rating available on request)
- Form 3B segregation
- Tin - plated busbar systems throughout the range
- Metering options
- Reliable & safe operation assured through KEMA testing & certification
- Top & bottom extension modules / access for larger cables
- Versatile solution, accommodating different size outgoing MCCBs
- Enhanced safety through fully shrouded incoming devices, to protect against contact with live parts
- Blanking plates finger protect unused outgoing ways
- Epoxy polyester paint finish RAL7004, Grey
- Enclosure thickness 1.5 mm



### Selection of Panel Board:

#### 200ECG Panelboard

- Compact single enclosure design
- 2, 4, 6, 8 or 10 outgoing TP ways
- 200A rated busbars
- Tested to 80kA I cf, 25kA I cc, 25kA - 1 sec I cw
- MSH2003 Isolator, MSH1603 or MFHSD1003 as incomer options
- G-Frame outgoing MCCBs 16A - 125A
- G SP blanking plate PBECB3 available for unused ways



#### 200ECG

No of ways	2	4	6	8	10
<b>Article number</b>					
Isolator Incomer 200A (included)	22ECGIS	42ECGIS	62ECGIS	82ECGIS	102ECGIS
Isolator Incomer 160A (included)	22ECGIS/160	42ECGIS/160	62ECGIS/160	82ECGIS/160	102ECGIS/160
Isolator Incomer (not included)	22ECGISSHP	42ECGISSHP	62ECGISSHP	82ECGISSHP	102ECGISSHP
F-frame MCCB Incomer (not incl.)	22ECGISF	42ECGIF	62ECGIF	82ECGIF	102ECGIF

#### 250ECG Panelboard

- Modular Panelboard design
- 4, 6, 8, 10, 12, 14, 16 or 18 outgoing TP ways
- 250A rated busbars
- Tested to 40kA I cc, 25kA - 1 sec I cw
- J-Frame incomer up to 250A
- G-Frame outgoing MCCBs 16A - 125A
- CG SP blanking plate PBECB3 available for unused ways
- Extension box and meterpack available
- Ordering code with suffix "/A" denotes 100% neutral with lug termination



#### 250ECG outgoing MCCB modules

No of ways	4	6	8	10	12	14	16	18
<b>Article number</b>								
G-frame MCCB outgoer (not incl.)	42ECG	46ECG	82ECG	102ECG	122ECG	142ECG	162ECG	182ECG

**250ECG incoming MCCB modules**

Article number			
J-frame MCCB Incomer (not incl.)	2ECGCJS	2ECGCJL	2ECGCJL/A
<b>Max. Incomer rating</b>	250A	250A	250A
<b>Provision for Meterpack CTs</b>	No	Yes	Yes



**400ECG Panelboard**

- Modular Panelboard design
- 4, 6, 8, 10, 12, 14, 16, or 18 outgoing TP ways
- 400A rated busbars
- Tested to 40kA I cc, 30kA - 1sec I cw
- K-Frame incomer up to 400A
- G-Frame outgoing MCCBs 16A - 125A
- G SP blanking plate PBECB3 available for unused ways
- Extension Box and Meterpack available
- Ordering code with suffix "/A" denotes 100% neutral with lug termination

**400ECG extension modules**

Article number	
400A Meterpack	4ECGMP4
Extension box	2ECGEXS

**400ECG outgoing mccb modules**

No of ways	4	6	8	10	12	14	16	18
<b>Article number</b>								
G-frame MCCB outgoer (not incl.)	44ECG	64ECG	84ECG	104ECG	124ECG	144ECG	164ECG	184ECG

**400ECG INCOMING MCCB MODULES**

Article number		
K-frame MCCB Incomer (not incl.)	4ECGCLL	4ECGCLL/A
<b>Max. Incomer rating</b>	400A	400A
<b>Provision for Meterpack CTs</b>	Yes	Yes



**400ECFG Panelboard**

- Modular Panelboard design
- 6, 8, 10, 12, 14, 16 or 18 outgoing TP ways
- 400A rated busbars
- Tested to 40kA I cc, 35kA - 1 sec I cw
- J-Frame incomer up to 250A or K-Frame incomer up to 400A
- 2 F-Frame outgoing MCCBs 16A - 225A
- 4, 6, 8, 10, 12, 14 or 16 CG-Frame outgoing MCCBs 16A – 125A
- F TP blanking plate PBJCB3 available for unused ways
- G SP blanking plate PBECB3 available for unused ways
- Extension box and meterpack available
- Ordering code with suffix "/A" denotes 100% neutral with lug termination

**400ECFG outgoing mccb modules**

No of ways	4	6	8	10	12	14	16	18
<b>Article number</b>								
F-frame MCCB outgoer (not incl.)	44EC2F2G	64EC2F4G	84EC2F6G	104EC2F8G	124EC2F10G	144EC2F12G	164EC2F14G	184EC2F16G
G-frame MCCB outgoer (not incl.)								

**400ECFG INCOMING MCCB MODULES**

Article number	J-frame MCCB Incomer (not incl.)	K-frame MCCB Incomer (not incl.)	Direct connection	
	4ECFGCJL	4ECFGCJL/A	4ECFGCLL	4ECFGCLL/A
<b>Max. Incomer rating</b>	250A	250A	400A	400A
				Direct connection

## Incomer selection

### Isolator incomer



Part No	Article number	Description
MFHSD1003	MFHSD1003	100A TP Din Rail Isolator
MSH1603	MSH1603	160A TP Din Rail Isolator
MSH2003	MSH2003	200A TP Din Rail Isolator

## MCCB Incomer

### F-Frame



Part number	Article number	Description
FWF3125VL	FWF3125VL	125A TP MCCB Fixed Thermal/Fixed Magnetic 40KA with Line and Load Terminals
FWF3160VL	FWF3160VL	160A TP MCCB Fixed Thermal/Fixed Magnetic 40KA with Line and Load Terminals
FWF3175VL	FWF3175VL	175A TP MCCB Fixed Thermal/Fixed Magnetic 40KA with Line and Load Terminals
FWF3200VL	FWF3200VL	200A TP MCCB Fixed Thermal/Fixed Magnetic 40KA with Line and Load Terminals
FWF3225VL	FWF3225VL	225A TP MCCB Fixed Thermal/Fixed Magnetic 40KA with Line and Load Terminals
KPEKM1	KPEKM1	End Cap Kit for F frame MCCB TP

### J-Frame



Part number	Article number	Description
JW3160V	JW3160V	160A TP MCCB Adj (125-160A) Thermal Adj (800-1600) Magnetic 40KA
JW3200V	JW3200V	200A TP MCCB Adj (160-200A) Thermal Adj (1000-2000) Magnetic 40KA
JW3250V	JW3250V	250A TP MCCB Adj (200-250A) Thermal Adj (1250-2500) Magnetic 40KA
KPEKM2	KPEKM2	End Cap Kit for J frame MCCB TP

### K-Frame



Part number	Article number	Description
KW3315V	KW3315V	315A TP MCCB Adj (250-315A) Thermal Adj (1575-3150) Magnetic 45KA
KW3400V	KW3400V	400A TP MCCB Adj (315-400A) Thermal Adj (2000-4000) Magnetic 45KA
KPEKM3	KPEKM3	End Cap Kit for K Frame MCCB TP

**Note:** Endcap kits are used breaker line or load to connect bus bar or similar electrical connections. Includes hardware

**Incomer selection**

**G-Frame Single Phase**



Part number	Article number	Description
GWF1016V	GWF1016V	16A SP MCCB Fixed Thermal/Fixed Magnetic 20KA
GWF1020V	GWF1020V	20A SP MCCB Fixed Thermal/Fixed Magnetic 20KA
GWF1032V	GWF1032V	32A SP MCCB Fixed Thermal/Fixed Magnetic 20KA
GWF1040V	GWF1040V	40A SP MCCB Fixed Thermal/Fixed Magnetic 20KA
GWF1050V	GWF1050V	50A SP MCCB Fixed Thermal/Fixed Magnetic 20KA
GWF1063V	GWF1063V	63A SP MCCB Fixed Thermal/Fixed Magnetic 20KA
GWF1070V	GWF1070V	70A SP MCCB Fixed Thermal/Fixed Magnetic 20KA
GWF1080V	GWF1080V	80A SP MCCB Fixed Thermal/Fixed Magnetic 20KA
GWF1100V	GWF1100V	100A SP MCCB Fixed Thermal/Fixed Magnetic 20KA

**G-Frame Three Phase**



Part number	Article number	Description
GWF3016V	GWF3016V	16A TP MCCB Fixed Thermal/Fixed Magnetic 25KA
GWF3020V	GWF3020V	20A TP MCCB Fixed Thermal/Fixed Magnetic 25KA
GWF3032V	GWF3032V	32A TP MCCB Fixed Thermal/Fixed Magnetic 25KA
GWF3040V	GWF3040V	40A TP MCCB Fixed Thermal/Fixed Magnetic 25KA
GWF3050V	GWF3050V	50A TP MCCB Fixed Thermal/Fixed Magnetic 25KA
GWF3063V	GWF3063V	63A TP MCCB Fixed Thermal/Fixed Magnetic 25KA
GWF3070V	GWF3070V	70A TP MCCB Fixed Thermal/Fixed Magnetic 25KA
GWF3080V	GWF3080V	80A TP MCCB Fixed Thermal/Fixed Magnetic 25KA
GWF3100V	GWF3100V	100A TP MCCB Fixed Thermal/Fixed Magnetic 25KA
GWF3125V	GWF3125V	125A TP MCCB Fixed Thermal/Fixed Magnetic 25KA

**F-Frame Single Phase**



Part number	Article number	Description
FWF1016VL	FWF1016VL	16A SP MCCB Fixed Thermal/Fixed Magnetic 40KA with Line and Load Terminals
FWF1020VL	FWF1020VL	20A SP MCCB Fixed Thermal/Fixed Magnetic 40KA with Line and Load Terminals
FWF1032VL	FWF1032VL	32A SP MCCB Fixed Thermal/Fixed Magnetic 40KA with Line and Load Terminals
FWF1040VL	FWF1040VL	40A SP MCCB Fixed Thermal/Fixed Magnetic 40KA with Line and Load Terminals
FWF1050VL	FWF1050VL	50A SP MCCB Fixed Thermal/Fixed Magnetic 40KA with Line and Load Terminals
FWF1063VL	FWF1063VL	63A SP MCCB Fixed Thermal/Fixed Magnetic 40KA with Line and Load Terminals
FWF1080VL	FWF1080VL	80A SP MCCB Fixed Thermal/Fixed Magnetic 40KA with Line and Load Terminals
FWF1100VL	FWF1100VL	100A SP MCCB Fixed Thermal/Fixed Magnetic 40KA with Line and Load Terminals

**F-Frame Three Phase**

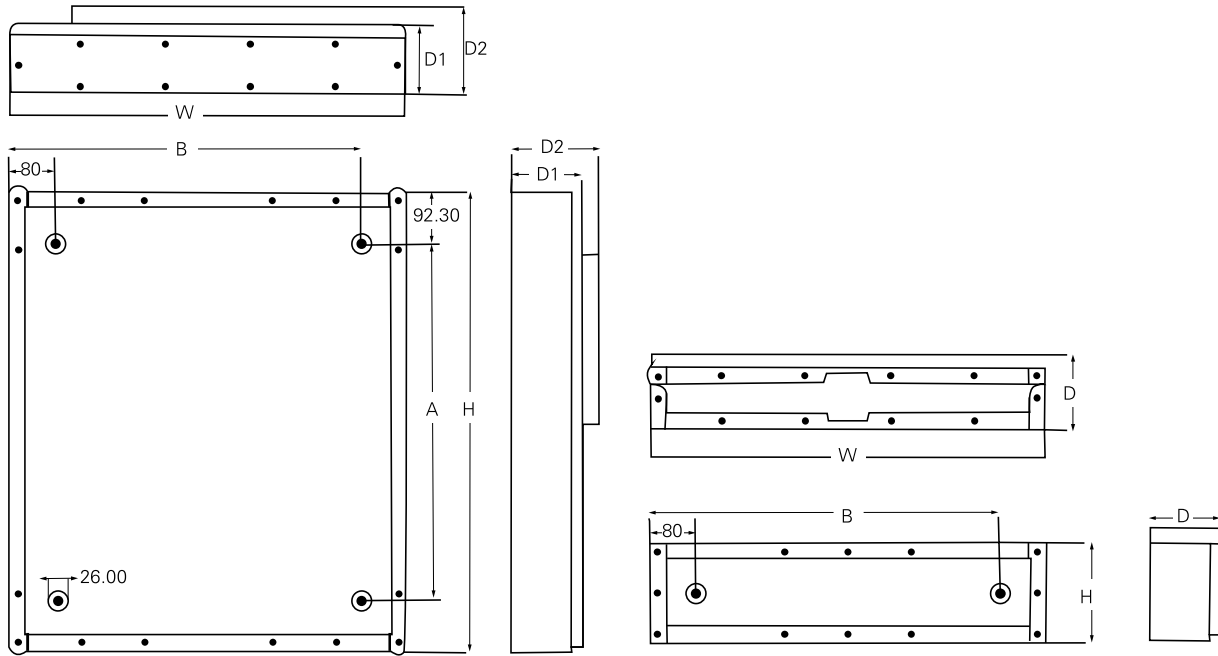


Part number	Article number	Description
FWF3016VL	FWF3016VL	16A TP MCCB Fixed Thermal/Fixed Magnetic 40KA with Line and Load Terminals
FWF3020VL	FWF3020VL	20A TP MCCB Fixed Thermal/Fixed Magnetic 40KA with Line and Load Terminals
FWF3032VL	FWF3032VL	32A TP MCCB Fixed Thermal/Fixed Magnetic 40KA with Line and Load Terminals
FWF3040VL	FWF3040VL	40A TP MCCB Fixed Thermal/Fixed Magnetic 40KA with Line and Load Terminals
FWF3050VL	FWF3050VL	50A TP MCCB Fixed Thermal/Fixed Magnetic 40KA with Line and Load Terminals
FWF3063VL	FWF3063VL	63A TP MCCB Fixed Thermal/Fixed Magnetic 40KA with Line and Load Terminals
FWF3080VL	FWF3080VL	80A TP MCCB Fixed Thermal/Fixed Magnetic 40KA with Line and Load Terminals
FWF3100VL	FWF3100VL	100A TP MCCB Fixed Thermal/Fixed Magnetic 40KA with Line and Load Terminals
FWF3125VL	FWF3125VL	125A TP MCCB Fixed Thermal/Fixed Magnetic 40KA with Line and Load Terminals
FWF3160VL	FWF3160VL	160A TP MCCB Fixed Thermal/Fixed Magnetic 40KA with Line and Load Terminals

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## Memguard MCCB Panel Board

### Dimensions



Panelboards

Extension boxes

Ordering codes	Memguard 200ECG	H (mm)	W (mm)	A (mm)	B (mm)	D1 (mm)	D2 (mm)
22ECGIS	02 Way "C" MCCB Panelboard 200A Isolator Incomer	633	700	530	540	125	155
42ECGIS	04 Way "C" MCCB Panelboard 200A Isolator Incomer	710	700	607	540	125	155
62ECGIS	06 Way "C" MCCB Panelboard 200A Isolator Incomer	787	700	684	540	125	155
82ECGIS	08 Way "C" MCCB Panelboard 200A Isolator Incomer	864	700	761	540	125	155
102ECGIS	10 Way "C" MCCB Panelboard 200A Isolator Incomer	941	700	838	540	125	155
22ECGCF	02 Way "C" MCCB Panelboard (F-Frame) 200A Incomer	633	700	530	540	125	155
42ECGCF	04 Way "C" MCCB Panelboard (F-Frame) 200A Incomer	710	700	607	540	125	155
62ECGCF	06 Way "C" MCCB Panelboard (F-Frame) 200A Incomer	787	700	684	540	125	155
82ECGCF	08 Way "C" MCCB Panelboard (F-Frame) 200A Incomer	864	700	761	540	125	155
102ECGCF	10 Way "C" MCCB Panelboard (F-Frame) 200A Incomer	941	700	838	540	125	155

Ordering codes	Memguard 250ECG	H (mm)	W (mm)	A (mm)	B (mm)	D1 (mm)	D2 (mm)
22ECGMP2	"C" MCCB Panelboard MeterPack 250A	175	700	-	540	125	-
42ECG	04 Way "C" MCCB Panelboard Outgoing 250A	410	700	230	540	125	155
62ECG	06 Way "C" MCCB Panelboard Outgoing 250A	487	700	307	540	125	155
82ECG	08 Way "C" MCCB Panelboard Outgoing 250A	564	700	384	540	125	155
102ECG	10 Way "C" MCCB Panelboard Outgoing 250A	641	700	461	540	125	155
122ECG	12 Way "C" MCCB Panelboard Outgoing 250A	718	700	538	540	125	155
142ECG	14 Way "C" MCCB Panelboard Outgoing 250A	795	700	615	540	125	155
162ECG	16 Way "C" MCCB Panelboard Outgoing 250A	872	700	692	540	125	155
182ECG	18 Way "C" MCCB Panelboard Outgoing 250A	949	700	769	540	125	155
2ECGCJS	"C" MCCB Panelboard J-Frame) 250A Incomer, Short	410	700	230	540	125	-
2ECGCJL	"C" MCCB Panelboard (J-Frame) 250A Incomer, Long	500	700	320	540	125	-
2ECGEXS	"C" MCCB Panelboard 250A Small Extension Module	175	700	-	540	125	-
2ECGEXM	"C" MCCB Panelboard 250A Medium Extension Module	500	700	370	540	125	-
2ECGEXL	"C" MCCB Panelboard 250A Large Extension Module	680	700	550	540	125	-
2ECGDC	"C" MCCB Panelboard 250A Direct Incomer	410	700	280	540	125	-

Ordering codes	Memguard 400ECG	H (mm)	W (mm)	A (mm)	B (mm)	D1 (mm)	D2 (mm)
4ECGMP4	"C" MCCB Panelboard MeterPack 400A	175	700	-	540	125	-
44ECG	04 Way "C" MCCB Panelboard Outgoing 250A	410	700	230	540	125	155
64ECG	06 Way "C" MCCB Panelboard Outgoing 250A	487	700	307	540	125	155
84ECG	08 Way "C" MCCB Panelboard Outgoing 250A	564	700	384	540	125	155
104ECG	10 Way "C" MCCB Panelboard Outgoing 250A	641	700	461	540	125	155
124ECG	12 Way "C" MCCB Panelboard Outgoing 250A	718	700	538	540	125	155
144ECG	14 Way "C" MCCB Panelboard Outgoing 250A	795	700	615	540	125	155
164ECG	16 Way "C" MCCB Panelboard Outgoing 250A	872	700	692	540	125	155
184ECG	18 Way "C" MCCB Panelboard Outgoing 250A	949	700	769	540	125	155
4ECGCLS	"C" MCCB Panelboard (K-Frame) 400A Incomer, Short	680	700	500	540	125	-
4ECGCLL	"C" MCCB Panelboard (K-Frame) 400A Incomer, Long	770	700	590	540	125	-
4ECGDC	"C" MCCB Panelboard 400A Direct Incomer G Module	410	700	280	540	125	-

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## Memguard MCCB Panel Board

Ordering codes	Memguard 400ECFG	H (mm)	W (mm)	A (mm)	B (mm)	D1 (mm)	D2 (mm)
4ECFGMP2	"C" MCCB Panelboard MeterPack 250A	175	850	-	670	125	-
4ECFGMP4	"C" MCCB Panelboard MeterPack 250A	175	850	-	670	125	-
64EC2F4G	06 Way "C" MCCB Panelboard ( 2 X F ) and ( 4 X G ) Outgoing 400A	660	850	457	670	170	200
84EC2F6G	08 Way "C" MCCB Panelboard ( 2 X F ) and ( 6 X G ) Outgoing 400A	737	850	534	670	170	200
104EC2F8G	10 Way "C" MCCB Panelboard ( 2 X F ) and ( 8 X G ) Outgoing 400A	814	850	611	670	170	200
124EC2F10G	12 Way "C" MCCB Panelboard ( 2 X F ) and ( 10 X G ) Outgoing 400A	891	850	688	670	170	200
144EC2F12G	14 Way "C" MCCB Panelboard ( 2 X F ) and ( 12 X G ) Outgoing 400A	968	850	765	670	170	200
164EC2F14G	16 Way "C" MCCB Panelboard ( 2 X F ) and ( 14 X G ) Outgoing 400A	1045	850	842	670	170	200
1854EC2F16G	18 Way "C" MCCB Panelboard ( 2 X F ) and ( 16 X G ) Outgoing 400A	1123	850	919	670	170	200
4ECFGCLS	"C" MCCB Panelboard (J-Frame) 400A Incomer, Short	654	850	477	670	170	-
4ECFGCJL	"C" MCCB Panelboard (J-Frame) 400A Incomer, Long	770	850	567	670	170	-
4ECFGCLS	"C" MCCB Panelboard ( K-Frame) 400A Incomer, Short	823	850	620	670	170	-
4ECFGCLL	"C" MCCB Panelboard ( K-Frame) 400A Incomer, Long	910	850	707	670	170	-
4ECFGDC	"C" MCCB Panelboard 400A Direct Incomer F Module	490	850	287	670	170	-