2

# **POWER PRODUCT Meter Centres**



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# **Introduction and General Specifications**

Siemens multi-family metering includes an assortment of module types that can be configured to meet a wide range of residential, commercial or industrial group metering applications. This feature-rich product line is designed with the contractor in mind. Quality and service are keystones of Siemens meter centres. Siemens meter centres are designed and manufactured in Canada, to meet Canadian requirements.

# **General Specifications**

#### **Standards**

CSA: C22.2 No. 229-M1988. Certified under file #153416

# **Meter Stack Design**

Siemens meter stacks are of uniform design with flexibility in mind. All meter stacks are designed for "cold metering" in which individual subservice breakers are connected on the line side of the meter sockets thereby protecting the meter and all electrical equipment installed subsequent to it.

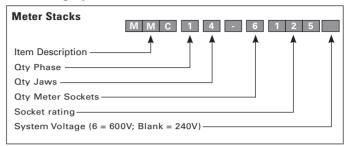
#### **Meter Stack Enclosure**

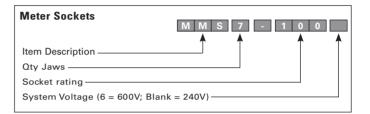
Type 1 enclosure. Meter stack enclosure, barriers and end plates are manufactured of galvanized steel. Front covers are fabricated of phosphatized steel finished with ASA 61 light grey paint.

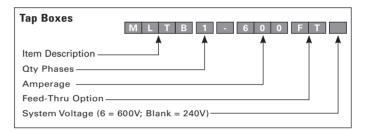
#### **Bus Bar**

The main horizontal bus consists of tin plated high conductivity aluminum for maximum performance and economy. The main cross bus is installed at the bottom of metering stacks and is rated at at 600A or 1200A while the vertical bussing is rated at 800A per section.

# **Numbering System**







Selection

# **Meter Centres**

# **240V Modular Meter Centres**

The Siemens metering line offers an economical approach to virtually any metering requirement, whether it be for residential, commercial or industrial applications at 240V.

# **Meeting All Your Service Needs**

Offering the maximum versatility to meet all your needs, Siemens 240V meter centres are designed for single phase three wire 120/240V AC or three phase four wire 120/208V AC applications with sub-service modules of 100A, 125A and 200A. Siemens 240V meter centres are designed to meet CSA requirements C22.2 No.229 and are CSA certified under file #13069. All individual metering stacks are manufactured to tight specifications and can be selected in pre-assembled units, to minimize on-site labour or as a separate plug-in module for a customized installation when required. The modular construction offers real post installation flexibility permitting on-site changes to be made with minimum down time.

# **Direct Tap Feature**

When using Siemens' direct tap Main Lug Feed Kit for services at 600A, no tap box is required, therefore saving considerable installation room.

This custom designed Main Lug Feed Kit allows connection of main incoming cables directly to the Meter Stack main bus and eliminates the need for a sub service tap box. If more working space is required to facilitate the connection, a Transition Box can be used.

# **Meter Stack Design**

All Siemens meter stacks are of uniform design with flexibility in mind. A combination of slide-in metering modules from 100 to 200A fit in any meter stack.

# **Mounting Rails**

Easy to use, the mounting rails simplify installation of the modular meter centre. They enable the metering stacks to be rapidly pre-installed on the wall, automatically aligning the sections for permanent mechanical installation and electrical joining of the main bus.



# **Meter Stack Enclosure**

Type 1 meter stack enclosure. Enclosure, barriers and end plates are manufactured of galvanized steel.. Front covers are fabricated of phosphatized steel finished with ASA 61 light grey paint. Meter socket front covers are embossed and fitted with a label to allow suite identification on the enclosure adjacent to its respective service breaker.

#### **Bus Bar**

The main horizontal bus consists of tin plated high conductivity aluminum for maximum performance and economy. The main cross bus is installed at the bottom of the metering stacks and is rated at 600 or 1200A while the vertical bussing is rated at 800A per section.

# **Flexibility**

Siemens service entrance equipment can be top or bottom fed, depending on site requirements, for single connection or feed through applications.

Each meter stack has a convenient side wireway for branch wiring which can exit at the top or at the bottom. A user-friendly combination of knockouts is factory installed at the top to minimize installation time.

# Slide-in Modular Design

Each individual slide-in module design allows for fast installation and provide flexibility for future needs. If the branch requirement changes, the module can be interchanged without changing the complete stack. By simply removing two screws from the front cover, the slide-in module can be removed for easy replacement.

# **Entry Plates**

Main cable tap boxes can be provided with punched or unpunched aluminum or fiber entry plates.

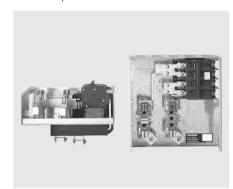
# **Branch Circuit Breakers**

Compact, high performance type plugin or bolt-on circuit breakers can be selected to address site requirements. Interrupting ratings up to 100kA combine thermal and magnetic trip elements and feature: isolated pole construction with common trip bar for multiple pole devices; silver alloy contacts and high pressure straight-in load connectors.

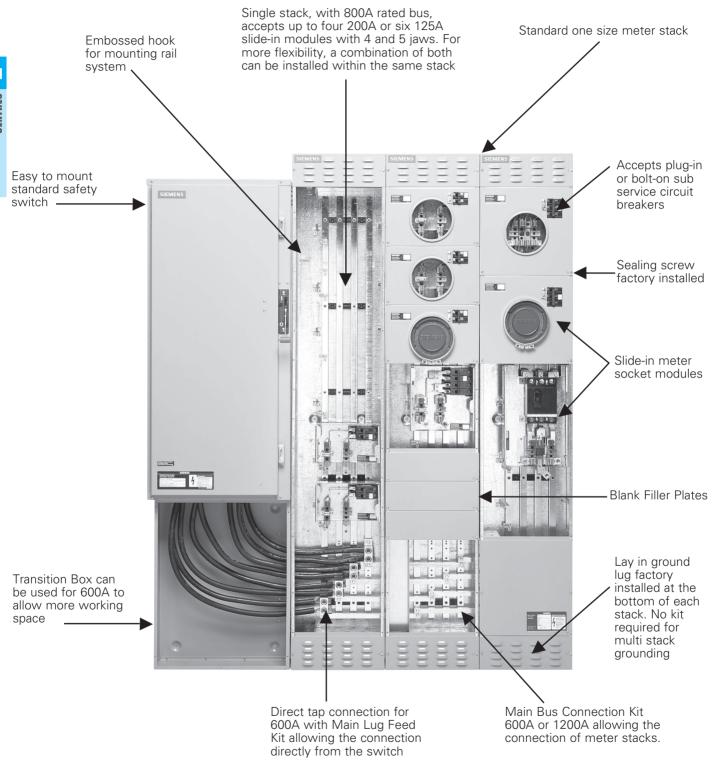
Series rating are also available for approved combinations up to 100kA.

# **Meter Socket Jaws**

Meter socket jaws consist of tin plated copper with steel spring reinforced clips for reliable contact pressure. Positive alignment of jaws and stabs is assured by bus straps which are bolted in place.



Overview - Features & Benefits



# **Meter Centres**

# **240V Modular Meter Centres**

# Selection Procedure

- 1. Select service entrance equipment (ex. switch), reference p.2-6.
- 2. Select required Tap Box or Main Lug Feed Kit with or without a Transition Box.
- 3. Select type and quantity of slide-in Meter Socket Modules.
- 4. Select Main Bus Connector Kits to join each stack.
- 5. Select quantity of Blank Filler Plates as per left over empty space.

Examples -	- Typical 600A Main Service	120/240V 1Ø 3W c/w 16 x 100A and	I x 200 sub-s	service breakers		
Option 1 c/w Tap Bo	ox & Bolt-on Breakers		Option 2 c/w Transition Box & Plug-in Breakers			
QTY	Catalogue Number	Description	QTY	Catalogue Number	Description	
1	ID226 or HFC226N	Safety switch 600A 2p 240V	1	ID226 or HFC226N	Safety switch 600A 2p 240V	
1	MLTB1-600	Standard Tap Box 600A	1	MTB-600	Transition Box 600A	
4	MMS4-125	Meter socket module 125A 4 jaws	1	MLFK1	Main lug kit	
2	MMC14-6125	Complete stack	4	MMS4-125	Meter socket module 125A 4 jaws	
1	MMC1	Basic stack	1	MMS4-200	Meter socket module 200A 4 jaws	
2	MBSS1-600	Main bus connector kit	2	MMC14-6125	Complete stack	
1	MBHP-2	Blank filler plates	1	MMC1	Basic stack	
16	BQ2B100	100A Bolt-on breaker	2	MBSS1-600	Main bus connector kit	
1	MTRK-64	Wall mounting rail	1	MBHP-2	Blank filler plates	
		•	16	Q2100	100A Plug-in breaker	
			1	EQ9685	200A Plug-in breaker	
			1	MTRK-64	Wall mounting rail	

# Reference Chart: Number of Blank Filler Plate Kits Required

olololog Grant Hambor of Blank Finor Flato Rate Head							
Refer to this chart to calculate how many Blank Filler Plate Kits are needed in a meter stack after the quantity of Meter Socket Module is determined.							
Catalogue Number	Description	Height in modules (1 module = 8 <sup>7/8"</sup> = 125 mm)	Oty of kits #MBHP-2 (2 plates/kit)				
MMC1 & MMC3	Basic meter stack	6 modules	6				
Meter socket module 125A 4 jaws		1 module	1				
MMS5-125	Meter socket module 125A 5 jaws	1 module	1				
MMS4-200	Meter socket module 200A 4 jaws	1.5 modules	2				
MMS5-200 Meter socket module 200A 5 jaws		1.5 modules	2				
MMS7-100	Meter socket module 100A 7 jaws	1.5 modules	2				

375 (170.1)

395 (179.1)

800

1200

Fusible Switches<sup>1</sup>

#### Dimensions - Inches (mm) Weight -Catalogue Cable lug size per phase -Ampere System lbs.(kg) Rating Number suitable for Al. and Cu. (1) 1/0 AWG - 750 Kcmil or 400 ID225 40 (1016)181/2 (470)121/16 (306) 78 (35.4) (2) 1/0 AWG - 250 Kcmil (2) 1/0 AWG - 750 Kcmil or 120/240 211/2 600 ID226 (1219)(546) 121/16 (306) 92 (41.7) 48 (4) 1/0 AWG - 250 Kcmil 1Ø 3W 91/4 800 HFC227N (1) 1/0 AWG - 750 Kcmil 673/16 (1706) 39<sup>15/16</sup> (1015) (235)365 (65.6) 1200 HFC228N (2) 1/0 AWG - 750 Kcmil 673/16 (1706) 39<sup>15/16</sup> (1015) 91/4 (235)385 (174.6) (1) 1/0 AWG - 750 Kcmil or 400 ID425 (1016) 18<sup>1/2</sup> (470) 121/16 (306) 92 (41.7) 40 (2) 1/0 AWG - 250 Kcmil 120/208 (2) 1/0 AWG - 750 Kcmil or 211/2 (546) 121/16 (306) 600 ID426 (1219) 48 108 (49) 3Ø 4W (4) 1/0 AWG - 250 Kcmil

67<sup>3/16</sup> (1706)

67<sup>3/16</sup> (1706)

39<sup>15/16</sup> (1015)

39<sup>15/16</sup> (1015)

91/4

91/4

(235)

(235)

# Standard Tap Boxes<sup>2</sup> - Connectors included

HFC367N

HFC368N

	Ampere		Cable lug size per phase -	Dimensions -	Weight -		
System	Rating		suitable for Al. and Cu cables <sup>ூ</sup>	Н	w	D	lbs.(kg) <sup>@</sup>
120/240	400/600	MLTB1-600	(3) #2 AWG - 600 Kcmil	25 <sup>3/4</sup> (655)	20 <sup>1/2</sup> (521)	7 <sup>1/4</sup> (184)	40 (18.2)
1Ø 3W	800/1200	MLTB1-1200 <sup>3</sup>	(4) 1/0 AWG - 750 Kcmil	25 <sup>3/4</sup> (655)	20 <sup>1/2</sup> (521)	7 <sup>1/4</sup> (184)	45 (20.5)
20/208	400/600	MLTB3-600	(3) #2 AWG - 600 Kcmil	25 <sup>3/4</sup> (655)	20 <sup>1/2</sup> (521)	7 <sup>1/4</sup> (184)	40 (18.2)
	800/1200	MLTB3-1200 <sup>3</sup>	(4) 1/0 AWG - 750 Kcmil	25 <sup>3/4</sup> (655)	20 <sup>1/2</sup> (521)	7 <sup>1/4</sup> (184)	45 (20.5)

# Feed Through Tap Boxes<sup>25</sup> - Connectors included, use with even number of meter stacks only

(1) 1/0 AWG - 750 Kcmil

(2) 1/0 AWG - 750 Kcmil

120/240	1.400/600   IVII.181-600F1		LUG (4) 250-750MCM or (8) 3/0-250MCM PER PHASE	25 <sup>3/4</sup>	(655)	201/2	(521)	71/4	(184)	45	(20.5)
1Ø 3W 800/1200 <b>MLTB1-1</b>		MLTB1-1200FT®	LUG (8) 1/0-750MCM PER PHASE	46 <sup>1/4</sup>	(1175)	24	(610)	71/4	(184)	60	(27.3)
3Ø 4W	400/600		LUG (4) 250-750MCM or (8) 3/0-250MCM PER PHASE	25 <sup>3/4</sup>	(655)	201/2	(521)	71/4	(184)	45	(20.5)
	800/1200	MLTB3-1200FT®	LUG (8) 1/0-750MCM PER PHASE	46 <sup>1/4</sup>	(1175)	24	(610)	71/4	(184)	60	(27.3)

# Main Lug Feed Kit - For direct tap (no tap box) from safety switch to meter stack

System	Ampere Rating	Catalogue Number	Cable lug size per phase - suitable for Al. and Cu cables	Use with Meter Module Type	Weight - lbs.(kg)	E
120/240 1Ø 3W	400/600	MLFK1	(1) 250 Kcmil - 750 Kcmil Cu/Al or (2) 3/0 AWG - 250 Kcmil Cu/AL	MMC1 or MMC14-6125	2 <sup>1/2</sup> (1.1)	
120/208 3Ø 4W	400/600	MLFK3	(1) 250 Kcmil - 750 Kcmil Cu/Al or (2) 3/0 AWG - 250 Kcmil Cu/AL	MMC3 or MM35-6125	3 (1.3)	MLFK



# Transition Box - Allows more working space to connect on Main Lug Feed Kit

Ampere Catalogue		Dimensions	Dimensions - Inches (mm)				
Rating	ing Number	Н	w	D	lbs.(kg)		
		253/4 201/2		201/2	71/4	30	
400/600	MTB-600	(655)	(521)	(184)	(13.7)	MTB-600	
	Ampere Rating	Ampere Catalogue Rating Number	Ampere Rating Catalogue Number H  A00/600 MTR-600 253/4	Ampere Rating         Catalogue Number         Dimensions - Inches (mm)           400/600         MTR-600         253/4         201/2	Ampere Rating         Catalogue Number         Dimensions - Inches (mm)           400/600         MTR-600         253/4         201/2         71/4	Ampere   Rating   Catalogue   Number   Dimensions - Inches (mm)   Weight - Ibs.(kg)	

<sup>1)</sup> Fusible switch can be mounted directly next to metering stack with a Standard Tap Box or with a Main Lug Feed Kit (with or without Transition Box).

<sup>@</sup> Tap Box mounts directly next to the Meter Stack and is required to accommodate incoming main service cable. unless Main Lug Feed Kit is used. Suitable for left and right side entry.

<sup>3</sup> Can be used with even and odd number of metering stacks. In addition, for odd number of stack connections, adaptor kit #MTBK12 must be used.

 $<sup>{\</sup>small \textcircled{4}}$  Weight is based on 3Ø 4W system (Heaviest pcs).

<sup>§</sup> Feed through tap boxes are required when the main incoming cables enter and exit at the same end of line up.

Module comes factory assembled for left hand side entry. For right hand side entry, bus bars and insulated supports must be moved at the other hole set, marked with an "R", before wall installation.

<sup>®</sup> For optional lugs, please contact your Siemens sales representative

# **240V Modular Meter Centres**

- 240V modular meter centre is built for cold metering
- Load cables can exit from the top or the bottom of the stack
- Meter stack comes standard with knock-outs on the top tub end (see p. 2-15)<sup>3</sup>

# Basic Meter Stack - Meter socket modules and front blank plates must be ordered seperately

Main Service	Sub-service	Catalogue Number			Dimensions - Inches (mm)			Height - MOD	Weight -
Voltage	oltage Voltage		125A	200A	Н	w	D	MIOD	ibs.(kg)
120/240 1Ø3W	120/240 1Ø3W	MMC1	6	4					67 (30.4)
120/208 3Ø4W	120/208 3Ø4W	ММСЗ	6	4	78 (1981)	14 (356)	7 <sup>1/4</sup> (184)	6	
120/208 3Ø4W	120/208 3Ø4W	MMC3 (with QJ/QR sub- service breaker)	4	2	,,,,,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, , , ,		67 (31.8)

# Complete Meter Stack 102 - Meter socket modules included

Main Service	Sub-service	Catalogue Number	Sub-service Meter	Dimensions - Inches (mm)			Height -	Weight -	
Voltage	Voltage	Catalogue Number	Socket included	Н	w	D	MOD	lbs.(kg)	
120/240 1Ø3W	120/240 1Ø3W	MMC14-6125	6 x MMS4-125	78	14	71/4		109 (49.6)	
120/208 3Ø4W	120/208 3Ø4W	MMC35-6125	6 x MMS5-125	(1981)	(356)	(184)	6	112 (50.9)	







① Provision only, breakers not included

② Complete meter stacks are factory balanced for ease of installation

<sup>®</sup> Blank top end is also available on demand. Contact your Siemens sales representative.

# ETER 2

# Meter Socket Module<sup>①</sup>

Sub-	Meter	Catalogue	Number of Jaws		BI G II	Height	Weight -	
service Voltage	Number		Number of Jaws Breaker Provision type		Phase Connection	in. (mm)	MOD	lbs.(kg)
	125A	MMS4-125	4	BQ, BQH, HBQ, Q, QP, QPH, HQP	AB	8 <sup>7/8</sup> (225)	1	7 (3.2)
120/240 1Ø3W	200A	MMS4-200	4	EQ96XX	— AB	13 <sup>5/16</sup>		11 (5)
200A	MMS4-200QR <sup>®</sup>	4	QR2, QRH2, HQR2	AD	(338)	1.5	11 (5)	
	125A	MMS5-125	5 <sup>®</sup>	BQ, BQH, HBQ, Q, QP, QPH, HQP	AB <sup>®</sup>	8 <sup>7/8</sup> (225)	1	7 (3.2)
	2004	MMS5-200	5 <sup>®</sup>	EQ96XX	- AB <sup>®</sup>	13 <sup>5/16</sup>	1.5	11 (5)
120/208 3Ø4W		MMS5-200QR <sup>®</sup>	5 <sup>®</sup>	QR2, QRH2, HQR2	Ab	(338)	1.5	11 (5)
	100A	MMS7-100	<b>7</b> <sup>②</sup>	BQ, BQH, HBQ, Q, QP, QPH, HQP	AB <sup>®</sup>	13 <sup>5/16</sup> (338)	1.5	10 (4.6)
	200A	MMS7-200QR <sup>®</sup>	<b>7</b> <sup>②</sup>	QR2, QRH2, HQR2 (3 phases)	AD	26 <sup>5/8</sup> (676)	3	16 (7.3)

# Main Bus Connector Kit - Allows the connection of two meter stacks

Sub- service Voltage	Max. Ampere Rating	Catalogue Number	Use with Meter Module Type	Weight - Ibs.(kg)					
120/240	600A	MBSS1-600	MMC1 or	3 (1.3)					
1Ø3W	1200A	MBSS1-1200	MMC14-6125	7 (3.18)					
120/208	600A	MBSS3-600	MMC3 or	4 (1.82)					
3Ø4W	1200A	MBSS3-1200	MM35-6125	10 (4.55)					



Meter Socket Modules	Cable lug size per phase - suitable for Al and Cu cables
MMS4-125	Load: (1) #14 AWG - 2/0 AWG
MMS4-200 MMS4-200QR	Load: (1) #6 AWG - 250 Kcmil
MMS5-125	Load: (1) #14 AWG - 2/0 AWG
MMS5-200 MMS5-200QR	Load: (1) #6 AWG - 250 Kcmil
MMS7-100	Load: (1) #14 AWG - 2/0 AWG
MMS7-200QR	Load: (1) #6 AWG - 250 Kcmil

① Provision only, breakers not included

Meter socket modules with 5 and 7 jaws can be assembled in the same meter stack as long as the system is balanced.

<sup>®</sup> MMS5-125 and MMS5-200 have AB phase connections by default. Phasing connections can be changed on the field to AC or BC to balance the load on the system.

Meter modules for QJ type breakers (MMS4-200QJ, MMS5-200QJ, MMS7-200) have been replaced by meter modules for QR type breakers.

Selection

# **Meter Centres**

# **240V Modular Meter Centres**

Sub-service Circuit Breakers - Maximum interruption rating for 240V AC

• Mounting hardware for BQ breakers must be ordered separately (#8217-6, #8217-12, #8217-100, #8217-200)

		Catalogue Number					
Ampere Rating	Poles	KAIC = 10kA		KAIC = 22kA		KAIC = 65kA	
		Plug-in	Bolt-on	Plug-in	Bolt-on	Plug-in	Bolt-on
60A <sup>①</sup>	2 3	Q260 Q360	BQ2B060 BQ3B060	Q260H Q360H	BQ2B060H BQ3B060H	Q260HH Q360HH	HB2B060 HB3B060
70A	2 3	Q270 Q370	BQ2B070 BQ3B070	Q270H Q370H	BQ2B070H BQ3B070H	Q270HH Q370HH	HB2B070 HB3B070
80A	2 3	Q280 Q380	BQ2B080 BQ3B080	Q280H Q380H	BQ2B080H BQ3B080H	Q280HH Q380HH	HB2B080 HB3B080
90A	2 3	Q290 Q390	BQ2B090 BQ3B090	Q290H Q390H	BQ2B090H BQ3B090H	Q290HH Q390HH	HB2B090 HB3B090
100A	2 3	Q2100 Q3100	BQ2B100 BQ3B100	Q2100H or EQ9675 Q3100H	BQ2B100H BQ3B100H	Q2100HH Q3100HH	HB2B100 HB3B100
110A	2 3	Q2110 Q3110	BQ2B110 N/A	Q2110H Q3110H	BQ2B110H N/A	Q2110HH Q3110HH	N/A N/A
125A	2 3	Q2125 N/A	BQ2B125 QR23B125	Q2125H or EQ9677 N/A	BQ2B125H QRH23B125	Q2125HH N/A	HQR23B125 HQR23B125
150A	2 3	EQ9683 N/A	QR22B150 QR23B150	EQ9683 N/A	QRH22B150 QRH23B150	N/A	HQR22B150 HQR23B150
175A	2 3	N/A	QR22B175 QR23B175	EQ9684 N/A	QRH22B175 QRH23B175	N/A	HQR22B175 HQR23B175
200A	2 3	EQ9685 N/A	QR22B200 QR23B200	EQ9685 N/A	QRH22B200 QRH23B200	N/A	HQR22B200 HQR23B200

Note: Low amperage circuit breakers (15-60A) available with installation of connector kit #MSMK-50

# Corner Elbow Modules - Permit continuation from stack to stack around corners

System	Ampere Rating	Catalogue Number	Dimension	Weight -		
Voltage			Н	w	D	lbs.(kg)
		-				

# **Inside Elbow Modules**

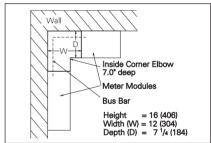
120/240 1Ø3W	600	MEL1-IN-6				45 (20)	
	1200	MEL1-IN-12	16 (406)	12 (304)	7 <sup>1/4</sup> (184)	45 (20)	
120/208 3Ø4W	600	MEL3-IN-6				E0 (22)	
	1200	MEL3-IN-12				50 (23)	

# **Outside Elbow Modules**

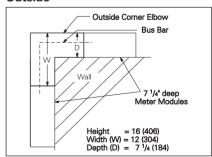
120/240 1Ø3W	600	MEL1-OUT-6	16 (406)	12 (304)	7 <sup>1/4</sup> (184)	45 (20)
	1200	MEL1-OUT-12				
120/208 3Ø4W	600	MEL3-OUT-6				F0 (00)
	1200	MEL3-OUT-12				50 (23)

Note: To connect a Tap Box to an Elbow, order MTBELK6 or MTBELK12. Connection from feed-through tap box 1200A to an elbow is not possible.

# Inside



# Outside



# Accessories

Catalogue Number	Description	Content
MBHP-2	Blank meter socket filler plate required to cover empty space, each steel plate has a dimension of 4.3 x 14.1 in.	2 half plates (1 MOD = 1 x MBHP-2)
MLTB-L2750	Alternative lug kit for 600A standard tap boxes	4 lugs 1/0 AWG - 750 Kcmil Al/Cu
MTBK12	Connection adaptor kit for tap box MLTB1-1200 or MLTB3-1200 when used for output with an odd number of meter stacks	4 connector spacers and hardware
MTRK-64	Wall mounting rail of 64 in., meter stack is supplied with embossed hooks for this mounting rail system	1 wall mounting track 64"
MTBELK6	Bus bar kit to connect a 600A standard or feed-through tap box via a 600A corner elbow	4 Bus Bars and hardware
MTBELK12	Bus bar kit to connect a 1200A standard tap box via a 1200A corner elbow	8 Bus bars and hardware
MSSR	Meter sealing ring	1 meter ring
MUJP-5	Jumper bar 200A max, 5 jaws, to jump a metering position when the meter has temporarily been removed	2 jumper bars
MUJP-7	Jumper bar 200A max, 7 jaws, to jump a metering position when the meter has temporarily been removed	3 jumper bars
SEALSC1	Sealing screw kit	25 sealing screws
SFLK-200	Subfeed lug kit 200A max.	4 lugs 6 AWG - 300 Kcmil Al/Cu
8217-6	BQ breaker mounting hardware	6 screws
8217-12	BQ breaker mounting hardware	12 screws
8217-100	BQ breaker mounting hardware	100 screws
8217-200	BQ breaker mounting hardware	200 screws

# **Replacement cover for Meter Socket Modules**

Catalogue Number	Description	Content		
MC4-125	125A 4 & 5-jaw front cover plate QP & BQ breakers		The same of the sa	
MC4-200	200A 4 & 5-jaw front cover plate QP & BQ breakers	1 cover plate		
MC4-200QR	200A 4 & 5-jaw front cover plate QR breaker	1 sealing ring		
MC7-100	100A 7-jaw front cover plate QP & BQ breakers	1 sealing screw		
MC7-200QR	200A 7-jaw front cover plate QR breaker		MC4-125	

# **Tap Box Modification Kits**

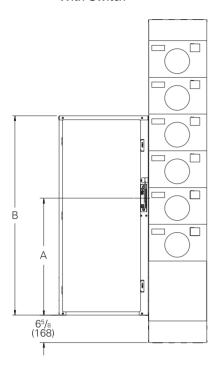
Catalogue Number	Description	Content
MLTB-AP	Al. plate punched for standard tap boxes and MLTB 600FT	
MLTB-AU	Al. plate unpunched for standard tap boxes and MLTB 600FT	
MLTB-AUFT	Al. plate unpunched for Feed-Through Tap Box 1200A	
MLTB-FP	Fiber plate punched for standard tap boxes and MLTB 600FT	1 tap box tub end
MLTB-FPFT	Fiber plate punched for Feed-Through Tap Box 1200A	
MLTB-FU	Fiber plate unpunched for standard tap boxes and MLTB 600FT	
MLTB-FUFT	Fiber plate unpunched for Feed-Through Tap Box 1200A	

Note: Multi-stack grounding is accomplished by running a bare wire through the factory installed lay-in lugs in the bottom of each stack. No grounding kit is required except when an elbow module is used.

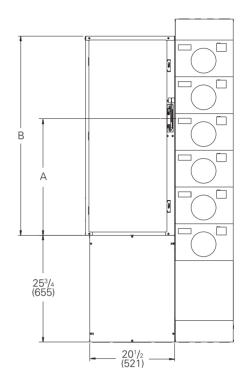
# **240V Modular Meter Centres**

# Configurations with switch

With Switch



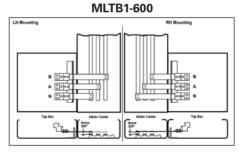
With Transition Box and Switch

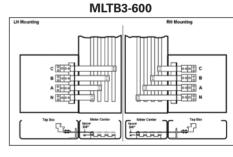


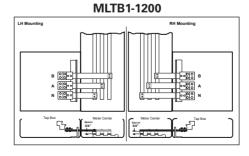
# Configurations with Standard Tap Box or Transition Box

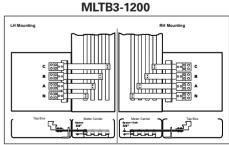
# MLTB1-600 MLTB3-600 MLTB3-1200 MLTB3-1200 MTB-600

# **Standard Tap Box connections**

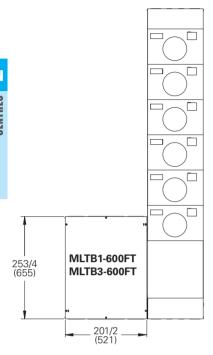




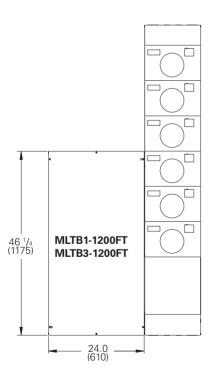




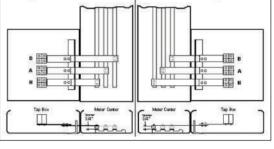
# Configurations with feed through Tap Box 600A

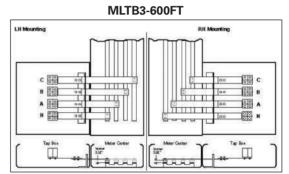


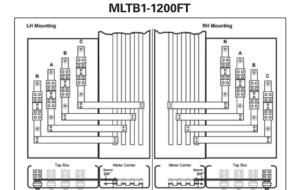
# Configurations with feed through Tap Box 1200A

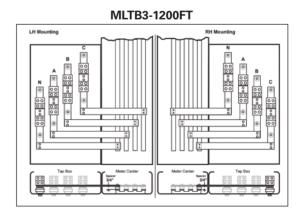


MLTB1-600FT







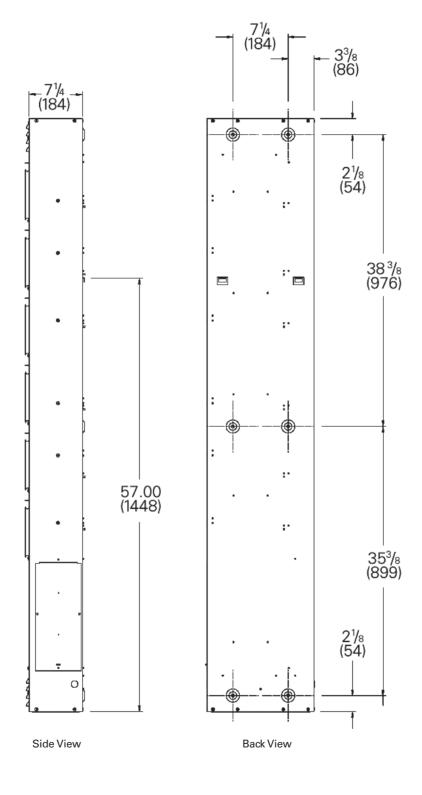


Note: For Feed-Through Tap Box 1200A, standard assembly is for left hand mounting. For right hand mounting, bus bar and insulated support must be moved at the other hole set (marked with an "R") before wall installation.

# **240V Modular Meter Centres**

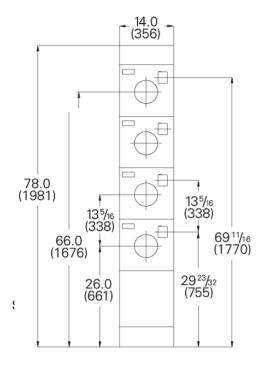
Meter Stack Mounting Dimensions - Inches (mm)

MMC1 MMC3

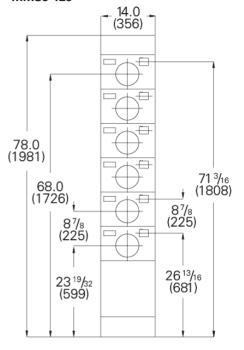


Meter Modules Dimensions - Inches (mm)

Meter Socket Module: MMS7-100

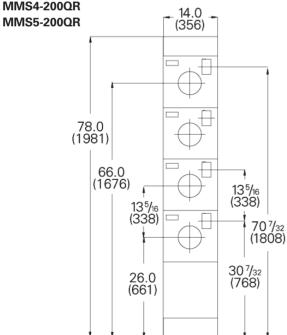


Meter Socket Modules: MMS4-125 MMS5-125

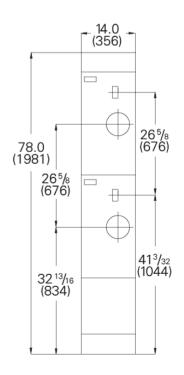


Meter Socket Modules:

MMS4-200 MMS5-200 MMS4-200QR



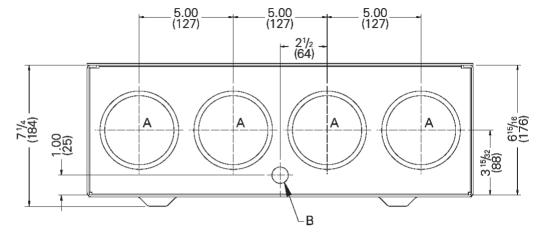
Meter Socket Module: MMS7-200QR



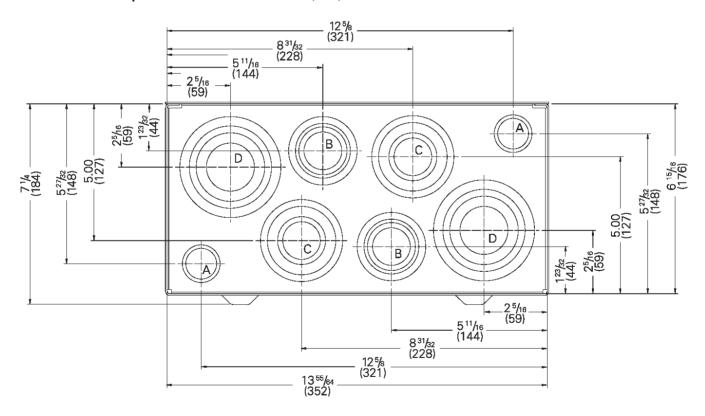
# **240V Modular Meter Centres**

Knock Out Data for tap boxes tub end - Inches (mm)

В	1 <sup>1/4</sup> - 1 <sup>1/2</sup> - 2
А	3-31/2
Ref.	K.O. Trade Size



Knock Out Data for top meter stack tub end - Inches (mm)



11/4 - 2 - 21/2 - 3	D
1 - 11/4 - 2 - 21/2	С
1 - 11/4 - 11/2 - 2	В
3/4 - 1	А
K.O. Trade Size	Ref.

# **Meter Centres**

# **240V Modular Meter Centres**

Reference

Layout example - Reference only

System: 120/240V 1Ph 3W, 10kA

# **Dimension of each stack:**

**Height:** 78" (1981mm) **Width:** 14" (356mm) **Depth:** 7 1/4" (184mm)

Height of the modules: ( 24 Modules)

**125A Module:** 8 7/8" (225.5mm)

Overall Width: 76 1/2" (1945mm)

Vented Cover	Vented Cover	Vented Cover	Vented Cover	5 1/8" 130mm
Module 125A [100A]	Module 125A 100A	Module 125A 100A	Module 125A [100A]	
Module 125A [100A]	Module 125A [100A]	Module 125A [100A]	Module 125A [100A]	
Module 125A [100A]	Module 125A [100A]	Module 125A [100A]	Module 125A [100A]	53 1/4"
Module 125A 100A	Module 125A 100A	Module 125A 100A	Module 125A 100A	1353mm 78" 1981m
Module 125A 100A	Module 125A 100A	Module 125A 100A	Module 125A 100A	
Module 125A [100A]	Module 125A [100A]	Module 125A [100A]	Module 125A [100A]	$\forall$
Main Cross Bus compartment	Main Cross Bus compartment	Main Cross Bus compartment	Main Cross Bus compartment	14 1/2" 368mm
Vented Cover	Vented Cover	Vented Cover	Vented Cover	5 1/8" 130mm
14" 356mm	14" 356mm	14" 356mm	14" 356mm	

METER 2

Direct Tap

with Transition Box

20 1/2"

25 3/4"

655mm

General

# **Meter Centres**

# 600Y/347V Meter Centre

# **General Specifications**

Siemens 600Y/347V metering line offers an ideal solution for restricted space projects. This metering solution for 600Y/347V applications has been designed in Canada based on contractors' feedback. Each meter stack houses features designed with the contractor in mind, to maximize productivity and minimize labour costs

# Voltage

600Y/347V AC

# **Amperage**

Horizontal bus bars rated for 1200A max. Vertical bus bars rated for 800A max. Meter socket rated for 200A max.

# **Short Circuit rating**

42,000A RMS symmetrical @ 600V max. when protected by 1200A maximum HRC class L type fuse

# Standard

CSA: C22.2 No. 229-M1988. Certified under file #153416

#### Service

3-phase 4-wire 600Y/347Vac

#### **Enclosure**

Type 1 enclosure. Meter stack comes standard with dripshield and blank end walls (no knockout). Meter stack enclosure, barriers and end plates are manufactured of galvanized steel. Front covers are fabricated of phosphatized steel finished with ASA 61 light grey paint.

#### **Meter Socket Jaws**

Meter socket jaws consist of tin plated copper with steel spring reinforced clips for reliable contact pressure. Positive alignment of jaws and stabs is assured by bus straps factory installed.

# **Sub-Service Breaker**

High performance bolt-on circuit breakers can be selected to address site requirements from 70 to 200A. Interrupting ratings up to 25kA combine thermal and magnetic trip elements. Series rating is also available for approved combination up to 42kA when protected by 1200A maximum HRC class L type fuse.

#### **Breaker Provisions**

Each 600V meter stack has provision for four 3-pole 200A max bolt-on type FXD6/HFXD6 circuit breaker. Non-interchangeable trip unit breakers must be used for this application. Generous gutter space allows for wiring for top or bottom of the meter module. All sub-service breaker mounting hardware is provided with each meter stack.

#### **Neutral & Ground Provisions**

Each stack includes neutral & ground provisions.

Connectors	Wire size
Neutral	#6 @ 350MCM #14 @ 2
Ground	#6 @ 250MCM



# Features

- Robust and compact enclosure standard with dripshield
- Sturdy bussing connections providing durable support for each sub-service breaker
- Breaker and bus bar protection allowing screws recuperation
- Provision to padlock sub-service breaker in the "off" position
- Large wireway separated from meter area for easier connections.
- Trouble-free access to horizontal bars and easy access to cabling area
- Reliable and simple busbar to busbar connections

# **600Y/347V Meter Centre**

Selection

# **600Y/347V Meter Stack**<sup>⊕</sup>② – 2 versions available

- Cold metering
- Includes 4 meter sockets 7-jaw rated for 200A max
- Load cables can exit enclosure at top and/or bottom
- Removable bottom plate to faciliate drilling holes for cable entry
- Horizontal main bus bar rated for 1200A max

- Uses Siemens breakers 200A max, type FXD6 and HFXD6 only
- Includes provisions for 4 sub-service breakers, 200A max.
- Type 1 enclosure, standard with dripshield and blank end walls
- Mounting hardware for 4 breaker is included in each stack
- "HQ" version has hinges for wireway covers

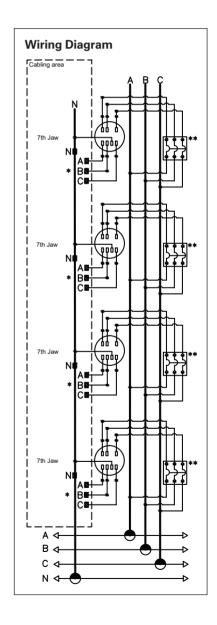
Main						Vertical Bus Bar	Overall dimensions in inches (mm)			
service voltage	Sub-service voltage	Catalogue number	number of jaws	of sub- service	breaker Type	rating (Amp)	Н	W	D	<b>Weight</b> - Ibs (kg)
600Y/347V 3Ø4W	600Y/347V 3Ø4W	MMC37-42006 MMC37-42006HQ	200A 7-Jaw	4	FXD6, HFXD6	800	76 <sup>1/4</sup> (1937)	20 <sup>5/8</sup> (524)	13 <sup>15/16</sup> (354)	220 (100)



MMC37-42006



MMC37-42006HQ



① Sub-service breakers are not to exceed meter socket rating

② Breaker provision only, breaker must be ordered separately. Breaker mounting hardware included with 600Y/347V meter stack.

**Accessories** 

# **Meter Centres**

# 600Y/347V Meter Centre

# **Sub-service Circuit Breakers**<sup>①</sup>

- Assembled circuit breaker without lugs (lugs not required for this application)
- Non-interchangeable trip only
- Breaker mounting hardware provided with meter stack
- Additional information on breaker available in section 5 page 5-24

		Max. interrupting rating for 600Y/347V		
		22 kA	25 kA	
Amperage Rating	Number of Poles	Catalogue Number	Catalogue Number	
70A	3	FXD63B070	HFXD63B070	
80A	3	FXD63B080	HFXD63B080	
90A	3	FXD63B090	HFXD63B090	
100A	3	FXD63B100	HFXD63B100	
110A	3	FXD63B110	HFXD63B110	
125A	3	FXD63B125	HFXD63B125	
150A	3	FXD63B150	HFXD63B150	
175A	3	FXD63B175	HFXD63B175	
200A	3	FXD63B200	HFXD63B200	



# **Standard Tap Boxes**

- "IN" lugs included
- Suitable for left and right hand side entry (standard configuration is left hand side)

Main Amperage Catalogue		Catalogue	Cable lug size per phase - suitable for Al and Cu cables	Overall Dimensions - Inches (mm)			Weight -
service	service Rating (Amp) Number			Н	W	D	lbs (kg)
600Y/347V	600	MLTB3-6006	(4) 1/0 @ 750MCM Cu/Al	25 <sup>1/8</sup> (638)	27 <sup>1/4</sup> (692)	13 <sup>15/16</sup> (354)	68 (30.8)
3Ø4W	1200	MLTB3-12006	(4) 1/0 @ 750MCM Cu/AI	25 <sup>1/8</sup> (638)	27 <sup>1/4</sup> (692)	13 <sup>15/16</sup> (354)	70 (31.8)

# Feed Through Tap Boxes

- "IN" and "OUT" lugs included
- Feed Through tap boxes are suitable for left and right hand side entry

Main Amperage Catalogue		Catalogue	Cable lug size per phase -	Overall Dimensions - Inches (mm)			Weight -
service	Rating (Amp)	Number	suitable for Al. And Cu cables	Н	W	D	lbs (kg)
600Y/347V	600	MLTB3-600FT6	(4) 250 @ 750 MCM Cu/Al or (8) 3/0 @ 250 MCM Cu/AL	25 <sup>1/8</sup> (638)	27 <sup>1/4</sup> (692)	13 <sup>15/16</sup> (354)	74 (33.6)
3Ø4W	1200	MLTB3-1200FT6	(8) 1/0 @ 750 MCM Cu/AI	50 <sup>5/8</sup> (1285)	27 <sup>1/4</sup> (692)	13 <sup>15/16</sup> (354)	145 (65.8)





Breaker mounting hardware kit included with 600V
 mater stack

# Close coupled option with Siemens SMP switchboard

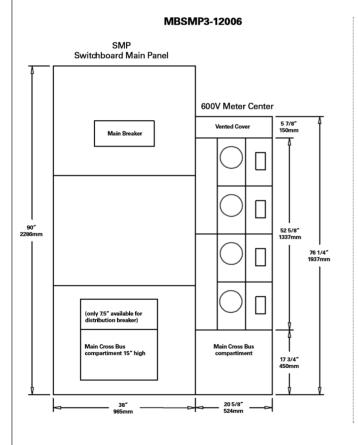
- SMP must have main breaker at top of the section
- Sill channel optional
- Close coupled option available for 1200A only
- Main bus connector kit required to connect stack with SMP. Main bus kit needs 15" high of space at the bottom of the SMP distribution section. In SMP with Hydro compartment, only 7.5" available for distribution breakers, just below the Hydro compartment.
- Suitable for left and right hand side entry based on main bus connector kit selection (standard configuration is left hand side entry as displayed below)

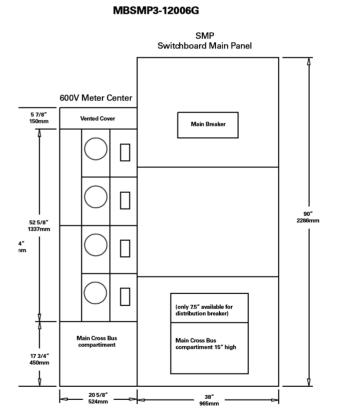
# Main Bus Connector Kit

Kit includes optional meter centre sill channel

Main service Voltage	Amperage Rating (Amp)	Catalogue Number	Description	Weight in lbs (kg)
600Y/347V 3Ø4W	1200	MBSMP3-12006	SMP Connector kit 1200A Max	12 (5.4)
	1200	MBSMP3-12006G	SMP Connector kit 1200A Max (left)	12 (5.4)

Meter centre MMC37-42006 with bus bar joining kit MBSMP3-12006 (where Meter Centre is on the right of the SMP) and with MBSMP3-12006G (where Meter Centre is on the left of the SMP) – Inches (mm)





**Accessories** 

# **Meter Centres**

# **600Y/347V Meter Centre**

# **Main Bus Link Connector Kits**

- Main Bus Link Connector Kits are required for each additional stack when joining two or more meter stacks.
- The first stack installation does not require bus links when installed with a tap box (standard or Feed through). The tap box is supplied with main service lugs and bus bar link connectors.

Main service	Amperage Rating	Catalogue Number	Description	Weight - Ibs (kg)
600Y/347V	600	MBSS3-6006	Stack to stack connector kit 600A	2 (0.9)
3Ø4W	1200	MBSS3-12006	Stack to stack connector kit 1200A	4 (1.8)

# MBSS3-6006

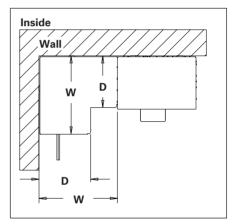
# **Inside Elbow Modules**

- Allow the continuation from stack to stack around wall corners.
- Can be mounted on the left and right hand side of the meter centre.

Main	Amperage	Catalogue	Overall Dimensions - Inches (mm)			Weight -	
service	Rating	Number	Н	W	D	lbs (kg)	
600Y/347V	600	MEL3-IN-6006	17 <sup>1/2</sup> (406)	20 <sup>1/2</sup> (521)	13 <sup>1/2</sup> (343)	65 (29.5)	
3Ø4W	1200	MEL3-IN-12006	17 <sup>1/2</sup> (406)	20 <sup>1/2</sup> (521)	13 <sup>1/2</sup> (343)	75 (34.0)	

# Accessories

Catalogue Number	Description	Content
SFLK-2006	Branch sub-feed lug kit, 600V	4 lugs
MSSR	Meter sealing ring	1 meter ring
MUJP-7	Jumper bars 7 jaws 200A	3 jumper bars
MBP2006	Blank meter plate covering meter socket and breaker provision	1 blank plate



Left mounting shown. Can be mounted on the right side of the meter stack if needed.

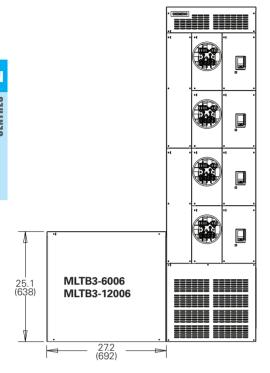
# **Replacement Parts**

•			
Catalogue Number	Description	Content	
MC7-200WS	Repl Front cover wiring section		
MC7-200WSHQ	Repl Front cover wiring section for HQ version		
MC7-200FD6	MC7-2006TC Reni Ton cover plate		
MC7-2006TC			
MC7-2006BC	Repl Bottom cover plate	Mounting hardware	
MC7-2006AP	Repl Access plate		
MC7-200600	Repl Front meter socket cover		
SCR-6006	Repl screws Stack to stack conn kit 600A 12 carr screws		
SCR-12006	Repl screws Stack to stack conn kit 1200A	& nuts. 4 regular screws & washers	
SCRFXD6	Repl breaker mounting screws	6 allen key type screws & washers. 2 long screws for breaker support	

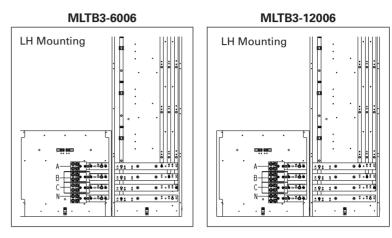




Configuration with standard Tap Box - Inches (mm)

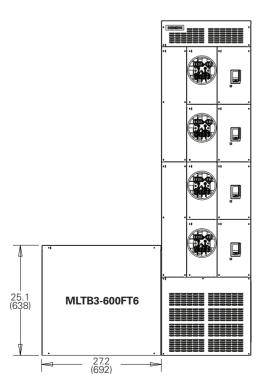


# Standard tap box connections



Note: Standard tap box can be mounted on the right hand side of the meter stack if needed.

# Configuration with feed-through tap box 600A - Inches (mm)

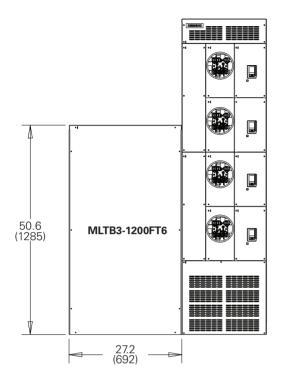


# 600A feed-through tap box connections

# MLTB3-600FT6 LH Mounting A STATE OF THE ST

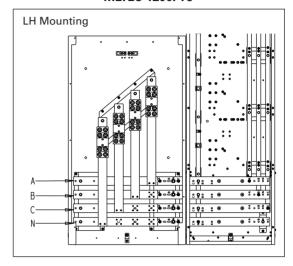
Note: 600A Feed-through tap box can be mounted on the right hand side of the meter stack if needed.

Configuration with feed-through tap box 1200A - Inches (mm)



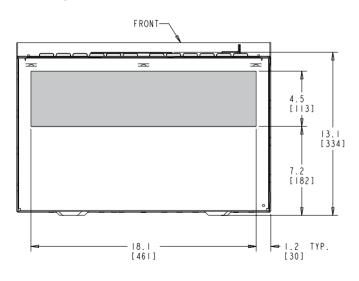
# 1200A feed-through tap box connections

# MLTB3-1200FT6

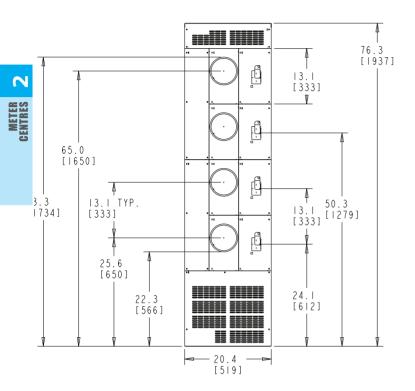


Note: 1200A feed-through tap box can be mounted on the right-hand side of the meter stack if needed.

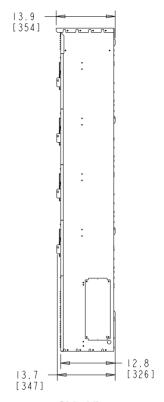
# Bottom plate for 600V Meter stack - Inches (mm)



Section can be easily removed to allow contractor to drill entry hole outside the equipment.

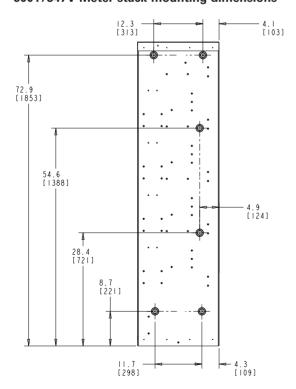


Front View



Side View

# 600Y/347V Meter stack mounting dimensions

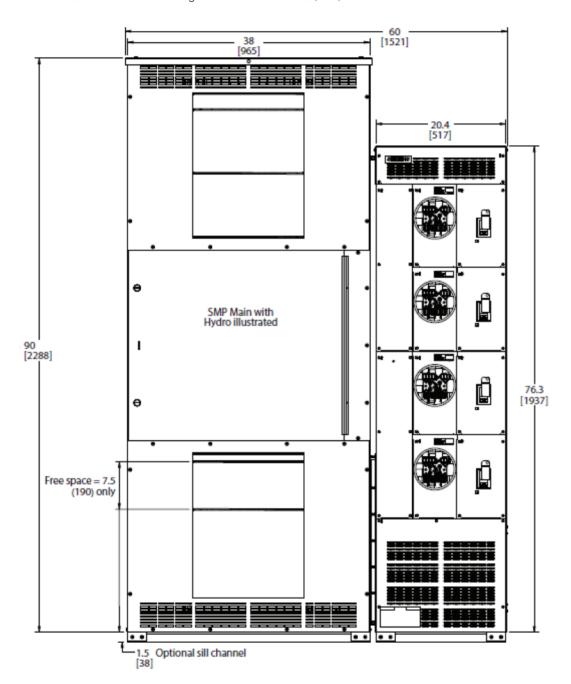


**Back View** 

# **600Y/347V Meter Centre**

# 600Y/347V Meter stack close coupled with SMP dimensions

Meter MMC37-42006 with bus bar joining kit MBSMP3-12006 where Meter Centre is on the right of the SMP - Inches(mm)



# **Meter Centres**

# **600Y/347V Meter Centre**

Reference

Layout example - Reference only

System: 1200A, 600Y/347V 3Ph 4W, 42kA

# **Dimension of each stack:**

**Height:** 76 1/4" (1937mm) **Width:** 20 5/8" (524mm) **Depth:** 12 7/8" (326mm)

Height of the modules:
Module: 13 1/8" (333mm)

Overall Width: 1740mm

25 1/8"

638mm

