

We touch your **electricity** everyday!

CSM Series Multi Function Electronic Panel Meter

ARTIS
Series

VERTIS
Series



Catalogue

CSM VERTIS SERIES

Single Row Display
Single Function
Three / Single Phase
No Communication

The CSM Series offers single function and multifunction digital panel meters. These digital panel meters measure all electrical qualities like Voltage, current, Power, energy, Frequency & Power Factor accurately. CSM Series is widely used for industrial & commercial application. All the models are very compact in size and are user friendly.



Triple Row Display
Multi Function
Three Phase
No Communication

CSM ARTIS SERIES

Triple Row Display
Multi Function
Three Phase
RS-485 Communication
Dual Source (Optional)



CSM VERTIS SERIES



CSME-V3-S1

Single Phase / Single Function

CSM-E Model No.	Description
CSM-E-V1-S1	1 Phase Volt Meter
CSM-E-I1-S1	1 Phase Ammeter
CSM-E-F1-S1	1 Phase Frequency Meter
CSM-E-P1-S1	1 Phase PF Meter

Three Phase / Single Function

CSM-E Model No.	Description
CSM-E-V3-S1	3 Phase Volt Meter
CSM-E-I3-S1	3 Phase Ammeter



CSME-M3-S3

Multi Function Meter

CSM-E Model No.	Description
CSM-E-M3-S3	3 Phase V+I+F Meter
CSM-E-M4-S3	3 Phase V+I+F+PF+KW Meter
CSM-E-M5-S3	3 Phase V+I+F+PF+KVA+KW+KWh Meter

Three Phase / Single Function

CSM-E Model No.	Description
CSM-E-E3-S1	3 Phase kWh Meter (in Single Row 6 Digit)

CSM VERTIS MODEL SELECTION TABLE

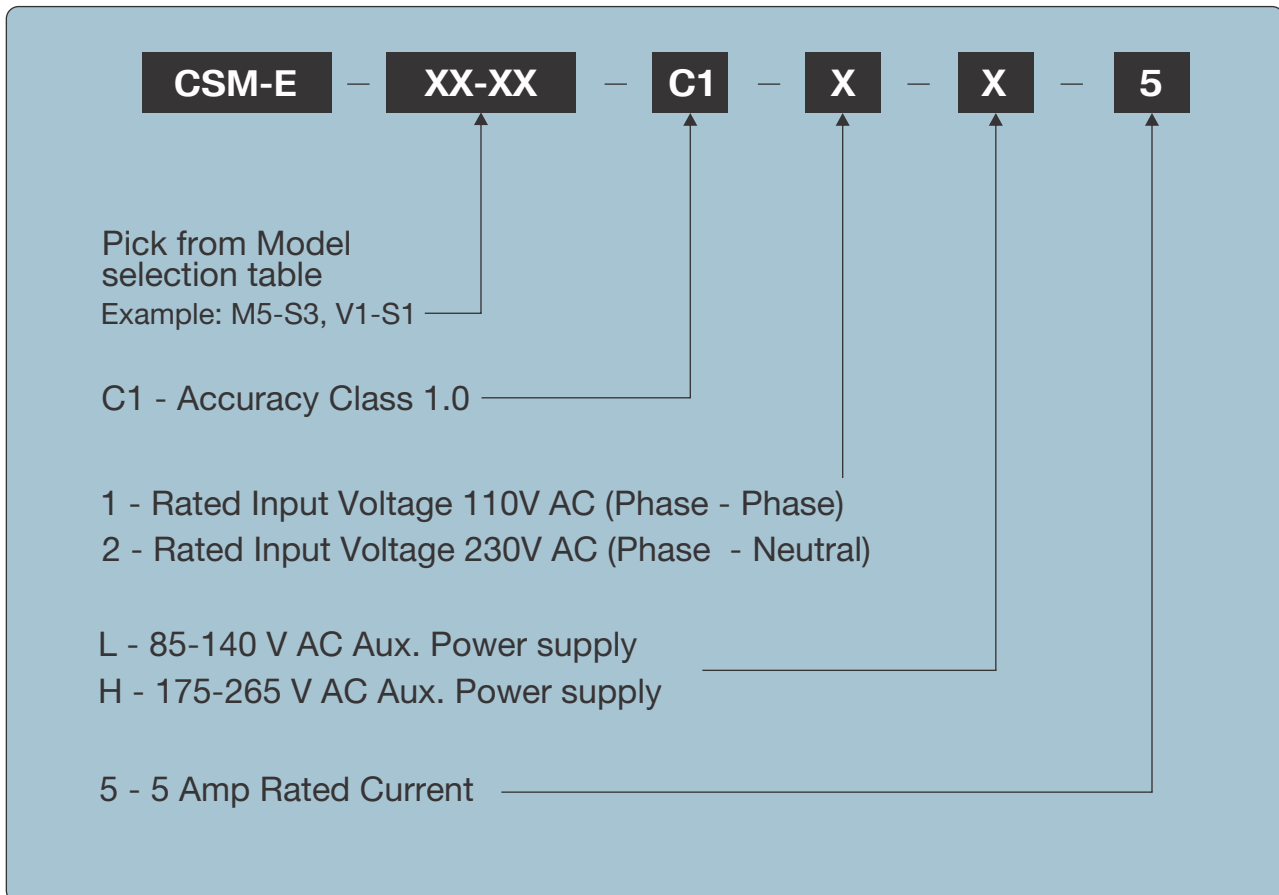
Model	No.of Row	V	A	F	PF	KW	KVA	KWh
V1-S1	1	1P	-	-	-	-	-	-
I1-S1	1	-	1P	-	-	-	-	-
F1-S1	1	-	-	1P	-	-	-	-
P1-S1	1	-	-	-	1P	-	-	-
V3-S1	1	3P	-	-	-	-	-	-
I3-S1	1	-	3P	-	-	-	-	-
E3-S1	1	-	-	-	-	-	-	3P
M3-S3	3	3P	3P	✓	-	-	-	-
M4-S3	3	3P	3P	✓	✓	3P	-	-
M5-S3	3	3P	3P	✓	✓	3P	3P	3P

3P 3 Phase

✓ Available

- Not Available

CSM VERTIS MODEL ORDERING INFORMATION



CSM ARTIS COMMUNICATION SERIES



CSME-M5-S3

Multi Function Meter

CSM Model No.	Description
CSM-M3-S3-C	3 Phase V+I+F Meter with comm.
CSM-M4-S3-C	3 Phase V+I+F+PF+KW Meter with comm
CSM-M5-S3-C	3 Phase V+I+F+kW+kVA+kWh Meter with Comm.
CSM-M5-S3-D-C	3 Phase Dual Source V+I+F+kW+kVA+kWh Meter with Comm.

Three Phase / Single Function

CSM Model No.	Description
CSM-E3-S3-C	3 Phase kWh Meter with comm.
CSM-E3-S3-D-C	3 Phase Dual Source kWh Meter with Comm.

CSM ARTIS MODEL SELECTION TABLE

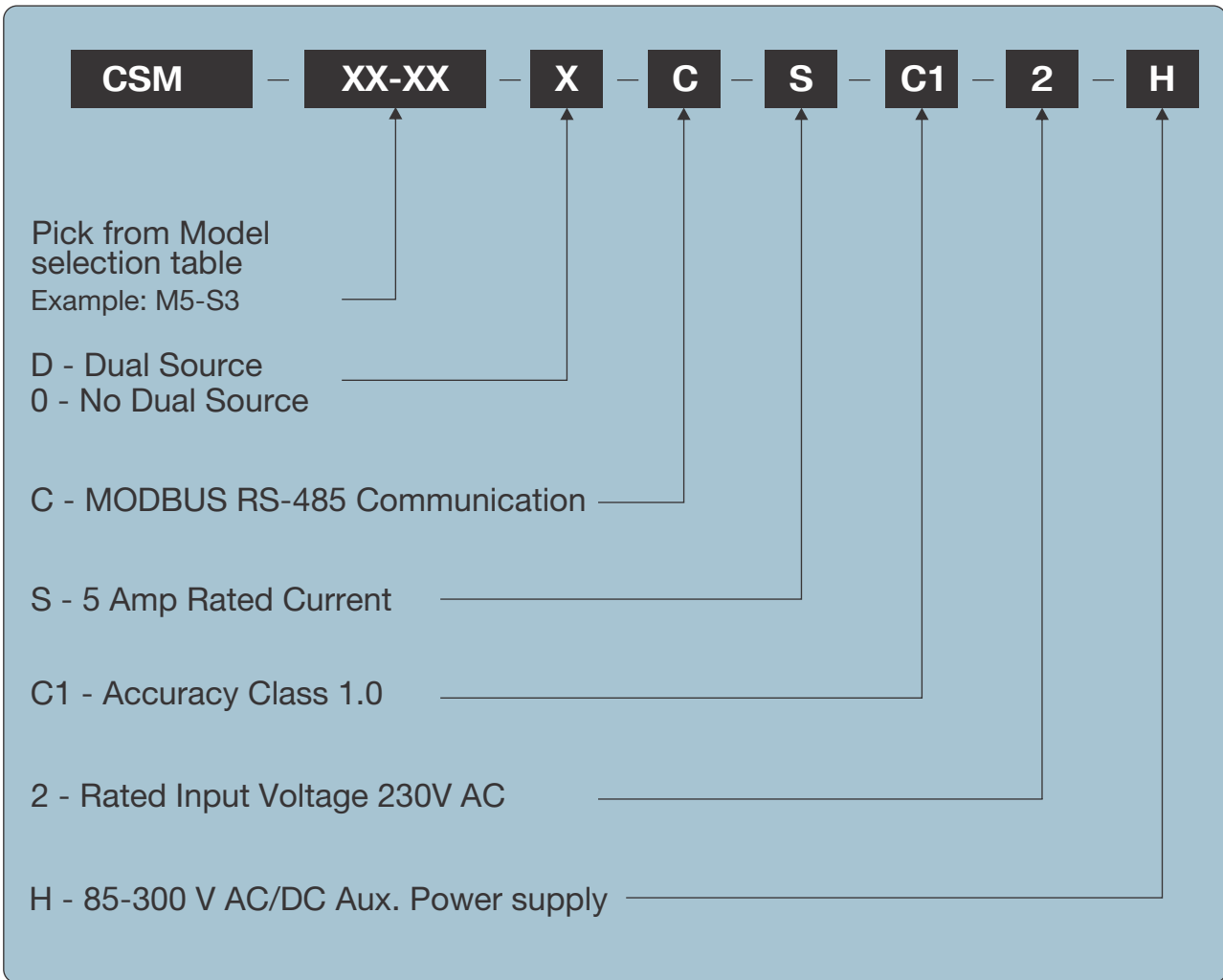
Model	No. of Row	V	A	F	PF	KW	KVAr	SP	KWh	KVArh	Dual	Comm.
CSM-M3-S3-C	3	3P	3P	✓	3P	3P	-	-	-	-	-	✓
CSM-M4-S3-C	3	3P	3P	✓	3P	3P	-	3P	-	-	-	✓
CSM-M5-S3-D	3	3P	3P	✓	3P	3P	-	3P	✓	-	✓	-
CSM-M5-S3-C	3	3P	3P	✓	3P	3P	-	3P	✓	-	-	✓
CSM-M5-S3-D-C	3	3P	3P	✓	3P	3P	-	3P	✓	-	✓	✓
CSM-E3-S3-D	3	3P	3P	-	-	-	-	-	✓	-	✓	-
CSM-E3-S3-C	3	3P	3P	-	-	-	-	-	✓	-	-	✓
CSM-E3-S3-D-C	3	3P	3P	-	-	-	-	-	✓	-	✓	✓
CSM-E4-S3-D	3	3P	3P	-	-	-	✓	✓	✓	✓	✓	-
CSM-E4-S3-C	3	3P	3P	-	-	-	✓	✓	✓	✓	-	✓
CSM-E4-S3-D-C	3	3P	3P	-	-	-	✓	✓	✓	✓	✓	✓

3P 3 Phase

✓ Available

- Not Available

CSM ARTIS MODEL ORDERING INFORMATION



TECHNICAL SPECIFICATIONS

ELECTRICAL	
System Network Connection	3 Phase, 4 Wire / 3 Phase, 3 Wire / 1 Phase, 2 Wire
Auxiliary Supply	175 - 265V AC
Voltage Measurement	20 - 300V AC (L-N) / 35- 485V AC (L-L) *
Current Measurement	50mA - 6.5A (Rated current 5A)
Frequency Measurement	45 - 65 Hz
CT/PT Ratio	Programmable
Power Factor (CosØ)	0.5 Lag 1 0.8 Lead
Burden	<0.1 VA approx. (per Phase Voltage) <0.4 VA approx. (per Phase Current) / <5 VA (Aux Supply)
Accuracy	Class 1.0
Insulation	2.5kV
Compliance	Design as per IEC 62053-21; ROHS compliance
COMMUNICATION	
Rear	** up to 31 address MODBUS RTU, 4800/9600/19200 baud rate
INPUT	
Digital Input	** 80-280V AC/DC
INSULATION	
Impulse Voltage Test	IEC-62053-21 (\pm 4kV)
ENVIRONMENT	
Operating Temperature Range	0°C to +55°C
Storage Temperature Range	-25°C to 70°C
Humidity Range	5% to 95% non condensing
Test of protection against penetration of dust & water	IP-54 (Front) (For Vertis Series) IP-50 (For Artis Series)
STANDARD APPLICABLE	
Radio Interference Suppression	Class B as per CISPR 22
Fast Transient Burst Test	IEC 61000-4.4 (\pm 4kV)
Test of Immunity to Electromagnetic RF fields	IEC 61000-4.3 (10V/m)
Test of Immunity to conducted disturbances induced by Radio frequency fields	IEC 61000-4.6 (3V)
Rated Power Frequency magnetic field	IEC 61000-4.8 (1 A/m)
Test of Immunity to electro static discharges	IEC 61000-4.2 (\pm 8kV air discharge \pm 6kV contact discharge)
Surge Immunity Test	IEC 61000-4.5 (\pm 4kV)
MECHANICAL	
Size	96 x 96 mm
Depth	50 mm (for Vertis Series), 56 mm (for Artis Series)
Mounting	Flush mounted by 2 clamped side lock / 4 corner lock
Panel cut out	91 x 91 mm
Terminal	Fixed Screw Type (for Vertis Series) Pluggable Type (for Artis Series)
Connection	U Type / Ring Type lug of 7 mm max. / PIN Type

* Single Phase Volt Meter (CSM-E-V1-S1) can be used for Phase to Neutral (P-N) as well as Phase to Phase (P-P) application. Please note that in both Phase to Phase & Phase to Neutral Application Aux. Supply will remain 175-265V AC.

** Available in Artis Series only.

Commercial Installation of CSM-E Meters



CSM Meter fixed on the Panel

Base Module fixed on the Panel

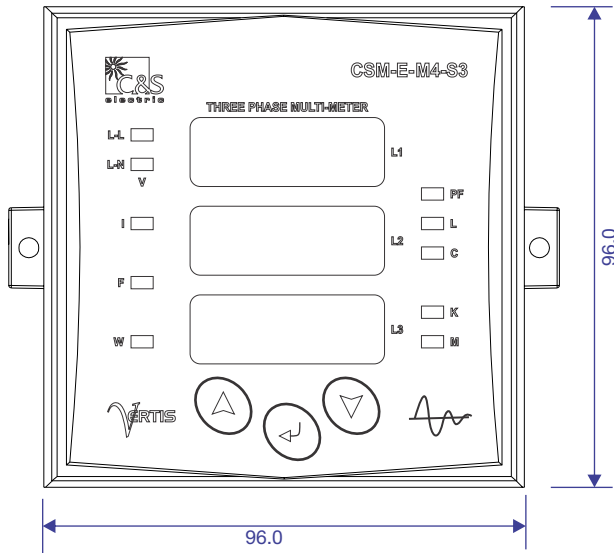


DIMENSIONAL DETAILS

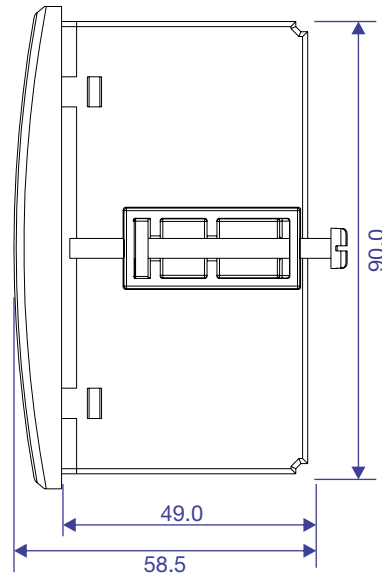
(All the dimensions are in mm)

CSM VERTIS SERIES

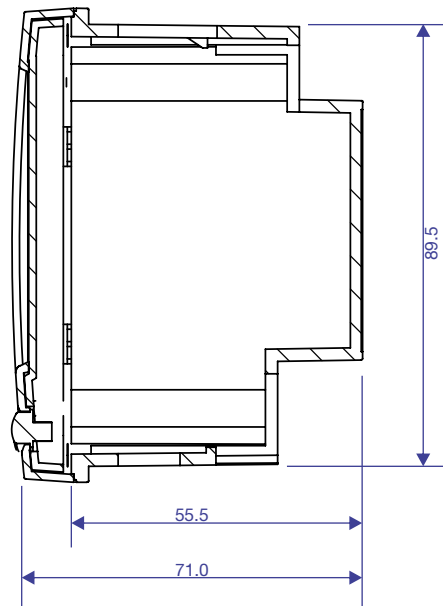
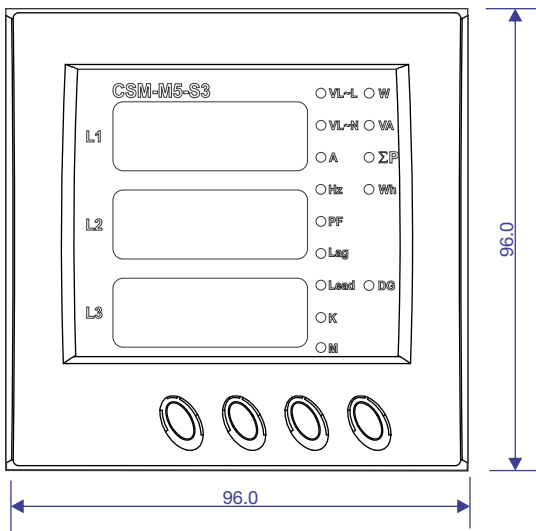
Front View



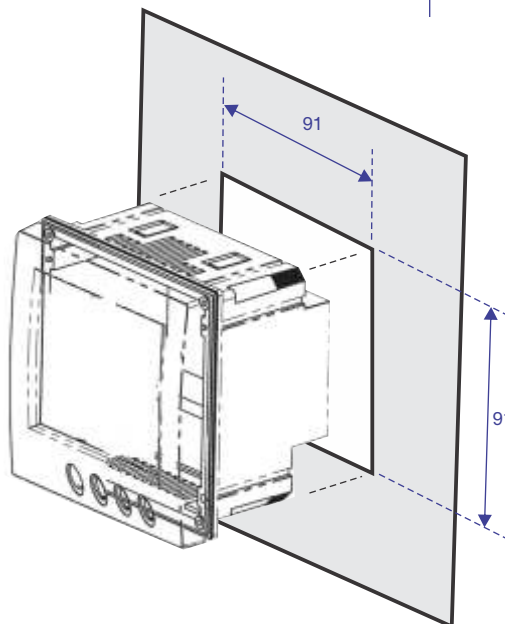
Side View



CSM ARTIS SERIES



PANEL CUT OUT DIMENSION



Revision History

S.No.	Rev.No.	Details	Date
01	01	Inclusion of Model Selection Table & Mechanical Details of CSM & CSME	20.04.15
02	02	Inclusion of M5-S3 Model in Vertis Series	08.08.15
03	03	Inclusion of ** noting on page no. 7 and change in ordering information of Artis / Vertis	04.12.15
04	04	Inclusion of Photograph of Meters showing its commercial installation	16.09.16

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Rev. No: 04
Rev. Date: 16.09.16

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