

# **Current Transformers**

#### **Features**

- → Comprehensive class accuracy
- → Cost effective moulded case current transformer
- Various mounting options including wall mounting, cable mounting, bus bar mounting and DIN rail mounting
- → Available in 0.2 & 0.2s accuracy class
- → Wire sealable terminal covers

Features given vary from product to product for more detailed product specific info please visit our website www.sifamtinsley.co.uk

#### **OMEGA XMER**

OMEGA XMER CT's are square type and encapsulated with UL94V-0 approved polycarbonate. These metering CT's feature sealable terminal covers and a wide range of primary current ratings. Available in various, Bus bar sizes, case widths, and mounting options.





### LCTM 62/W (62mm wide x 40mm deep)

Cat No.	Ratio	VA at CL 0.5
XW01-045055S000000	5/5A	2.5VA
XW01-065055S000000	10/5A	2.5VA
XW01-075055S000000	15/5A	2.5VA
XW01-085055S000000	20/5A	2.5VA
XW01-105055S000000	30/5A	2.5VA

Cat No.	Ratio	VA at CL 1.0
XW01-045041S000000	5/5A	5VA
XW01-065041S000000	10/5A	5VA
XW01-075041S000000	15/5A	5VA
XW01-085041S000000	20/5A	5VA
XW01-105041S000000	30/5A	5VA



### LCTM 74/W (74mm wide x 45mm deep)

Cat No.	Ratio	VA at CL 0.5
XW02-045085S000000	5/5A	5VA
XW02-065085S000000	10/5A	5VA
XW02-075085S000000	15/5A	5VA
XW02-085085S000000	20/5A	5VA
XW02-105085S000000	30/5A	5VA
XW02-115085S000000	40/5A	5VA

Ratio	VA at CL 1.0
5/5A	5VA
10/5A	5VA
15/5A	5VA
20/5A	5VA
30/5A	5VA
40/5A	5VA
	5/5A 10/5A 15/5A 20/5A 30/5A



#### LCTR 45/14 (45mm wide x 40mm deep x 14mm I.D.)

Cat No.	Ratio	VA at CL 0.5
XM01-175015S000000	80/5A	1VA
XM01-185035S000000	100/5A	1.5VA
XM01-195035S000000	120/5A	1.5VA
XM01-205055S000000	125/5A	2.5VA
XM01-225055S000000	150/5A	2.5VA
XM01-245075S000000	200/5A	3.75VA
XM01-285085S000000	300/5A	5VA
XM01-315085S000000	400/5A	5VA

Cat No.	Ratio	VA at CL 1.0
XM01-135031S000000	50/5A	1VA
XM01-145031S000000	50/5A	1.5VA
XM01-175051S000000	80/5A	2.5VA
XM01-185071S000000	100/5A	3.75VA
XM01-195071S000000	120/5A	3.75VA
XM01-205071S000000	125/5A	3.75VA
XM01-225081S000000	150/5A	5VA
XM01-245081S000000	200/5A	5VA



### LCTR 45/21 (45mm wide x 40mm deep x (21 x 10mm) I.D.)

Cat No.	Ratio	VA at CL 0.5
XM02-175015S000000	80/5A	1VA
XM02-185035S000000	100/5A	1.5VA
XM02-195035S000000	120/5A	1.5VA
XM02-225055S000000	150/5A	2.5VA
XM02-245055S000000	200/5A	2.5VA
XM02-285075S000000	300/5A	3.75VA
XM02-315085S000000	400/5A	5VA

Cat No.	Ratio	VA at CL 1.0
XM02-135031S000000	50/5A	1.5VA
XM02-145031S000000	60/5A	1.5VA
XM02-175051S000000	80/5A	2.5VA
XM02-185071S000000	100/5A	3.75VA
XM02-195071S000000	120/5A	3.75VA
XM02-225071S000000	150/5A	3.75VA
XM02-245081S000000	200/5A	5VA
XM02-285081S000000	300/5A	5VA
XM02-315081S000000	400/5A	5VA



# LCTR 50/21 (30) (50mm wide x 30mm deep x (21 x 10mm) I.D.)

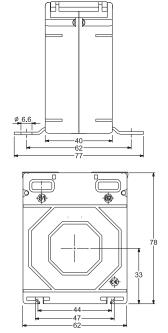
Cat No.	Ratio	VA at CL 0.5
XM05-175015S000000	80/5A	1VA
XM05-185035S000000	100/5A	1.5VA
XM05-205035S000000	125/5A	1.5VA
XM05-225055S000000	150/5A	2.5VA
XM05-245055S000000	200/5A	2.5VA
XM05-285075S000000	300/5A	3.75VA
XM05-315085S000000	400/5A	5VA

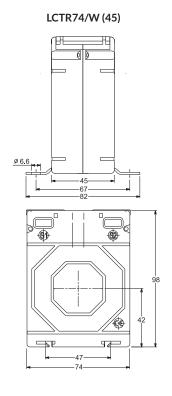
Cat No.	Ratio	VA at CL 1.0
XM05-175051S000000	80/5A	2.5VA
XM05-185051S000000	100/5A	2.5VA
XM05-205051S000000	125/5A	2.5VA
XM05-225081S000000	150/5A	5VA
XM05-245081S000000	200/5A	5VA
XM05-285101S000000	300/5A	7.5VA
XM05-315101S000000	400/5A	7.5VA

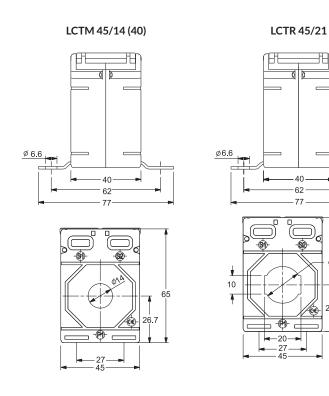


### **Dimensions**

LCTM 62/W (40)







ø 20





### LCTB 50/30 (30) (50mm wide x 30mm deep x (30 x 10mm) I.D.)

Cat No.	Ratio	VA at CL 0.5
XM07-185015S000000	100/5A	1VA
XM07-205015S000000	125/5A	1VA
XM07-225055S000000	150/5A	2.5VA
XM07-245055S000000	200/5A	2.5VA
XM07-285085S000000	300/5A	5VA
XM07-315085S000000	400/5A	5VA
XM07-325085S000000	500/5A	5VA
XM07-335085S000000	600/5A	5VA

Cat No.	Ratio	VA at CL 1.0
XM07-185051S000000	100/5A	2.5VA
XM07-205051S000000	125/5A	2.5VA
XM07-225071S000000	150/5A	3.75VA
XM07-245081S000000	200/5A	5VA
XM07-285081S000000	300/5A	5VA
XM07-315091S000000	400/5A	6.25VA
XM07-325091S000000	500/5A	6.25VA
XM07-335101S000000	600/5A	7.5VA



### LCTB 62/30 (62mm Wide x 40mm deep x (30 x 11mm) I.D.)

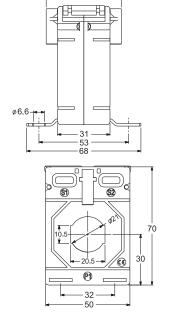
Cat No.	Ratio	VA at CL 0.5
XM11-185035S000000	100/5A	1.5VA
XM11-205055S000000	125/5A	2.5VA
XM11-225075S000000	150/5A	3.75VA
XM11-245085S000000	200/5A	5VA
XM11-285085S000000	300/5A	5VA
XM11-315105S000000	400/5A	7.5VA
XM11-325115S000000	500/5A	10VA
XM11-335135S000000	600/5A	15VA

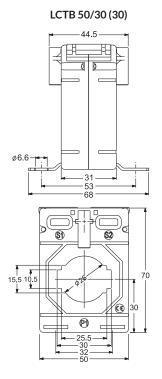
Cat No.	Ratio	VA at CL 1.0
XM11-185051S000000	100/5A	2.5VA
XM11-205071S000000	125/5A	3.75VA
XM11-225081S000000	150/5A	5VA
XM11-245101S000000	200/5A	7.5VA
XM11-285111S000000	300/5A	10VA
XM11-315121S000000	400/5A	12.5VA
XM11-325121S000000	500/5A	12.5VA
XM11-335131S000000	600/5A	15VA

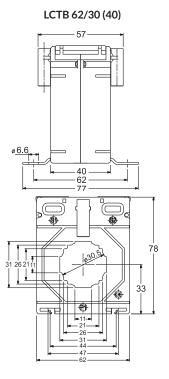
### **Dimensions**

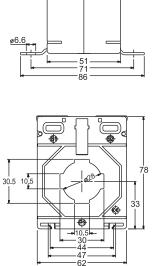


-44.5









LCTB 62/30 (50)



# LCTB 62/30 (50) (62mm wide x 50mm deep x (30 x 11mm) I.D.)

Cat No.	Ratio	VA at CL 0.5
XM12-185085S000000	100/5A	5VA
XM12-205085S000000	125/5A	5VA
XM12-225085S000000	150/5A	5VA
XM12-245115S000000	200/5A	10VA
XM12-285085S000000	300/5A	5VA
XM12-315135S000000	400/5A	15VA
XM12-325135S000000	500/5A	15VA
XM12-335145S000000	600/5A	20VA
XM12-365145S000000	750/5A	20VA
XM12-375145S000000	800/5A	20VA

Cat No.	Ratio	VA at CL 1.0
XM12-185081S000000	100/5A	5VA
XM12-205081S000000	125/5A	5VA
XM12-225101S000000	150/5A	7.5VA
XM12-245131S000000	200/5A	15VA
XM12-285131S000000	300/5A	15VA
XM12-315131S000000	400/5A	15VA
XM12-325131S000000	500/5A	15VA
XM12-335141S000000	600/5A	20VA
XM12-365141S000000	750/5A	20VA
XM12-375141S000000	800/5A	20VA



# LCTB 62/40 (62mm wide x 40mm deep x (40 x 11mm) I.D.)

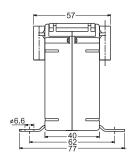
Cat No.	Ratio	VA at CL 0.5
XM13-245035S000000	200/5A	1.5VA
XM13-285085S000000	300/5A	5VA
XM13-315085S000000	400/5A	5VA
XM13-325085S000000	500/5A	5VA
XM13-335105S000000	600/5A	7.5VA
XM13-365115S000000	750/5A	10VA
XM13-375115S000000	800/5A	10VA

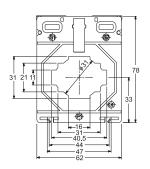
Cat No.	Ratio	VA at CL 1.0
XM13-245071S000000	200/5A	1.5VA
XM13-285081S000000	300/5A	5VA
XM13-315081S000000	400/5A	5VA
XM13-325101S000000	500/5A	7.5VA
XM13-335111S000000	600/5A	10VA
XM13-365111S000000	750/5A	10VA
XM13-375111S000000	800/5A	10VA



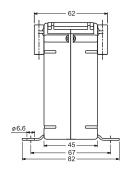
### **Dimensions**

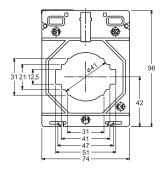
LCTB 62/40 (40)



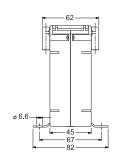


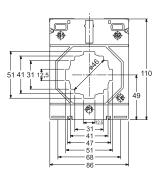
LCTB 74/50 (45)



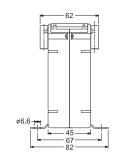


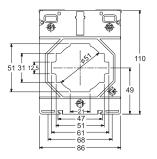
LCTB 86/50 (45)





LCTB 86/60 (45)









### LCTB 74/50 (74mm wide x 45mm deep x (50 x 12mm) I.D.)

Cat No.	Ratio	VA at CL 0.5
XM17-245055S000000	200/5A	2.5VA
XM17-285085S000000	300/5A	5VA
XM17-315085S000000	400/5A	5VA
XM17-325105S000000	500/5A	7.5VA
XM17-335115S000000	600/5A	10VA
XM17-365125S000000	750/5A	12.5VA
XM17-375125S000000	800/5A	12.5VA
XM17-395125S000000	1000/5A	12.5VA

Cat No.	Ratio	VA at CL 1.0
XM17-245071S000000	200/5A	3.75VA
XM17-285081S000000	300/5A	5VA
XM17-315101S000000	400/5A	7.5VA
XM17-325111S000000	500/5A	10VA
XM17-335121S000000	600/5A	12.5VA
XM17-365131S000000	750/5A	15VA
XM17-375131S000000	800/5A	15VA
XM17-395131S000000	1000/5A	15VA



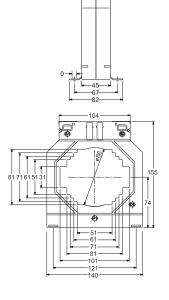
# LCTB 86/50 (86mm wide x 45mm deep x (50 x 12mm) I.D.)

Cat No.	Ratio	VA at CL 0.5
XM19-285105S000000	300/5A	7.5VA
XM19-315135S000000	400/5A	15VA
XM19-325135S000000	500/5A	15VA
XM19-335135S000000	600/5A	15VA
XM19-365135S000000	750/5A	15VA
XM19-375145S000000	800/5A	20VA
XM19-395155S000000	1000/5A	30VA
XM19-405155S000000	1200/5A	30VA
XM19-415155S000000	1250/5A	30VA

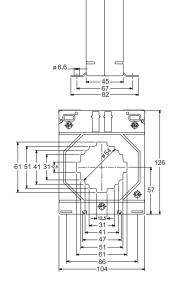
Cat No.	Ratio	VA at CL 1.0
XM19-285111S000000	300/5A	10VA
XM19-315131S000000	400/5A	15VA
XM19-325141S000000	500/5A	20VA
XM19-335141S000000	600/5A	20VA
XM19-365141S000000	750/5A	20VA
XM19-375151S000000	800/5A	30VA
XM19-395151S000000	1000/5A	30VA
XM19-405151S000000	1200/5A	30VA
XM19-415151S000000	1250/5A	30VA

### **Dimensions**

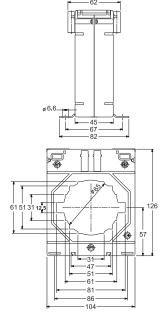
LCTB 140/100H (45)



LCTB 104/60 (45)



LCTB 104/80 (45)





# LCTB 86/60 (86mm wide x 45mm deep x ( $60 \times 12mm$ ) I.D.)

Cat No.	Ratio	VA at CL 0.5
XM20-335135S000000	600/5A	15VA
XM20-365135S000000	750/5A	15VA
XM20-375145S000000	800/5A	20VA
XM20-395145S000000	1000/5A	20VA
XM20-405145S000000	1200/5A	20VA
XM20-415145S000000	1250/5A	20VA
XM20-425145S000000	1500/5A	20VA
XM20-435145S000000	1600/5A	20VA

Cat No.	Ratio	VA at CL 1.0
XM20-335131S000000	600/5A	15VA
XM20-365141S000000	750/5A	20VA
XM20-375141S000000	800/5A	20VA
XM20-395141S000000	1000/5A	20VA
XM20-405141S000000	1200/5A	20VA
XM20-415141S000000	1250/5A	20VA
XM20-425141S000000	1500/5A	20VA
XM20-435141S000000	1600/5A	20VA



### LCTB 140/100H (140mm wide x 45mm deep x (100 x 30mm) I.D.)

Cat No.	Ratio	VA at CL 0.5
XM24-375135S000000	800/5A	15VA
XM24-395135S000000	1000/5A	15VA
XM24-405135S000000	1200/5A	15VA
XM24-415135S000000	1250/5A	15VA
XM24-425155S000000	1500/5A	30VA
XM24-435165S000000	1600/5A	45VA
XM24-445165S000000	2000/5A	45VA
XM24-466165S000000	2500/5A	45VA
XM24-485175S000000	3000/5A	60VA

Cat No.	Ratio	VA at CL 1.0
XM24-375141S000000	800/5A	20VA
XM24-395141S000000	1000/5A	20VA
XM24-405151S000000	1200/5A	30VA
XM24-415151S000000	1250/5A	30VA
XM24-425151S000000	1500/5A	30VA
XM24-435161S000000	1600/5A	45VA
XM24-445161S000000	2000/5A	45VA
XM24-466161S000000	2500/5A	45VA
XM24-485171S000000	3000/5A	60VA



# LCTB 104/60 (104mm wide x 45mm deep x ( $60 \times 12mm$ ) I.D.)

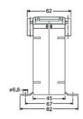
Cat No.	Ratio	VA at CL 0.5
XM21-335135S000000	600/5A	15VA
XM21-365145S000000	750/5A	20VA
XM21-375155S000000	800/5A	30VA
XM21-395155S000000	1000/5A	30VA
XM21-405155S000000	1200/5A	30VA
XM21-415155S000000	1250/5A	30VA
XM21-425155S000000	1500/5A	30VA
XM21-365155S000000	1600/5A	30VA

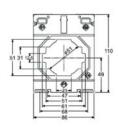
Cat No.	Ratio	VA at CL 1.0
XM21-335151S000000	600/5A	30VA
XM21-365151S000000	750/5A	30VA
XM21-375151S000000	800/5A	30VA
XM21-395161S000000	1000/5A	45VA
XM21-405161S000000	1200/5A	45VA
XM21-415161S000000	1250/5A	45VA
XM21-425161S000000	1500/5A	45VA
XM21-365161S000000	1600/5A	45VA



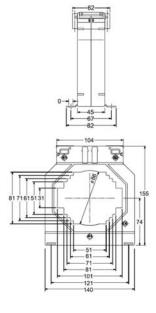
### **Dimensions**

LCTB 86/60

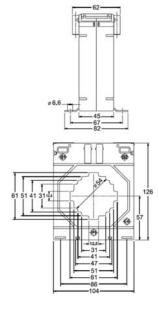




LCTB 140/100H



LCTB 104/60







### LCTB 104/80 (104mm wide x 45mm deep x (80 x 12mm) I.D.)

Cat No.	Ratio	VA at CL 0.5
XM22-375115S000000	800/5A	10VA
XM22-395145S000000	1000/5A	20VA
XM22-405145S000000	1200/5A	20VA
XM22-415145S000000	1250/5A	20VA
XM22-425145S000000	15000/5A	20VA
XM22-435145S000000	16000/5A	20VA
XM22-445145S000000	20000/5A	20VA

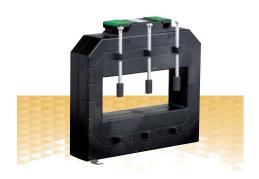
Cat No.	Ratio	VA at CL 1.0
XM22-375131S000000	800/5A	15VA
XM22-395141S000000	1000/5A	20VA
XM22-405151S000000	1200/5A	30VA
XM22-415151S000000	1250/5A	30VA
XM22-425151S000000	1500/5A	30VA
XM22-435151S000000	1600/5A	30VA
XM22-445151S000000	2000/5A	30VA



### LCTB 140/80 (140mm wide x 45mm deep x (80mm x 30mm) I.D.)

Cat No.	Ratio	VA at CL 0.5
XM23-375135S000000	800/5A	15VA
XM23-395155S000000	1000/5A	30VA
XM23-405155S000000	1200/5A	30VA
XM23-415175S000000	1250/5A	60VA
XM23-425175S000000	1500/5A	60VA
XM23-435175S000000	1600/5A	60VA
XM23-445175S000000	2000/5A	60VA

	CL 1.0
800/5A	45VA
1000/5A	60VA
1200/5A	60VA
1250/5A	60VA
1500/5A	60VA
1600/5A	60VA
2000/57	60VA
	1250/5A 1500/5A



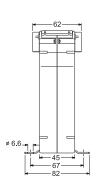
# LCTB 225/125 (225mm wide x 50mm deep x (167mm x 66mm) I.D.)

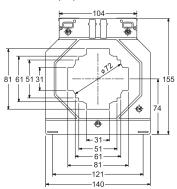
Cat No.	Ratio	VA at CL 0.5
XR04-445135S000000	2000/5A	15VA
XR04-465155S000000	2500/5A	30VA
XR04-485155S000000	3000/5A	30VA
XR04-515165S000000	4000/5A	45VA
XR04-525185S000000	5000/5A	100VA
XR04-535185S000000	6000/5A	100VA

Cat No.	Ratio	VA at CL 1.0
XR04-445151S000000	2000/5A	30VA
XR04-465151S000000	2500/5A	30VA
XR04-485171S000000	3000/5A	60VA
XR04-515171S000000	4000/5A	60VA
XR04-525181S000000	5000/5A	100VA
XR04-535181S000000	6000/5A	100VA

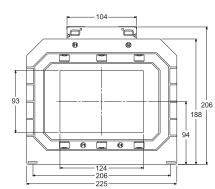
### **Dimensions**

LCTB 140/80 (45)





#### LCTB 225/125





### Polycarbonate Case Having UL 94 V-0

OMEGA XMER square type CT's are housed in robust case with classical finish. The case is made of polycarbonate, which is flame retardant and non-drip and confirms to international regulations UL 94 V-0. Polycarbonate is a very tough and light weight engineering plastic material which has got the best mechanical properties very close to a metallic housing.

### Main Types of XMER Series CT's

There are two main types of OMEGA XMER CT's. The first one is OMEGA XMER wound primary series CT's which consists of both primary and secondary windings. This type has two sizes 62/W (40) and 74/W (40).

The second type is OMEGA XMER series window type CT's which consists of secondary winding and primary has to be wound through the hole provided. This type has many sizes according to standard bus-bar sizes.

### Some Important Terms Used in XMER CT's

**Current Error (Ratio Error):-** The error with a transformer introduces into the measurement of current and which arises from the fact that actual transformation ratio is not equal to the rated transformation ratio.

Phase Displacement:- The difference in phase between the primary and secondary current vectors, the direction of the vectors being so chosen that the angle is zero for the perfect transformer. The phase displacement is said to be positive when the secondary current vector leads the primary current vector. It is usually expressed in minutes.

**Composite Error**: Composite error is the resulting limitation of the harmonic content of the secondary current which is necessary for the correct operation of certain types of relays.

**Accuracy Class:**- A designation assigned to a current transformer the errors of which remain within specified limit under prescribed conditions of use.

Rated Burden:- The impedance of the secondary circuit on which the accuracy requirements are based. It is usually expressed as apparent power (in VA), at the rated secondary current and at a specified power factor.

Rated Output:- The value of the apparent power (in volt-amperes at a specified power factor) which the current transformer is intended to supply to the secondary circuit at the rated secondary current and with rated burden connected to it.

**Highest System Voltage:-** The highest rms line to line voltage which can be sustained under normal operating conditions at any time and at any point on the system. It excludes temporary voltage variations due to fault condition and the sudden disconnection of large loads.

Rated Insulation Level:- That combination of voltage values (power frequency and lightning impulse, or where applicable, lightning and switching impulse) which characterizes the insulation of a transformer with regard to its capability to withstand by dielectric stresses. For low voltage transformer the test voltage 4kV, at power-frequency, applied during 1 minute.

Rated Short Time Thermal Current (Ith):- The RMS value of the primary current which the current transformer will withstand for a rated time, with their secondary winding short circuits without suffering harmful effects

Rated Dynamic Current (Idyn):- The peak value of the primary current which a current transformer will withstand, without being damaged electrically for mechanically by the resulting electromagnetic forces, the secondary winding being short-circuited.

Rated Continuous Thermal Current:- The value of current which can be permitted to flow continuously in the primary winding, the secondary windings being connected to the rated burdens, without the temperature rise exceeding the specified values.

**Instrument Security Factor (ISF):-** The ratio of rated instrument limit primary current to the rated primary current. The times that the primary current must be higher then the rated value, for the composite error of a measuring current transformer to be equal to or greater than 10%, the secondary burden being equal to the rated burden. The lower this number is, the more protected the connected instrument are against.