

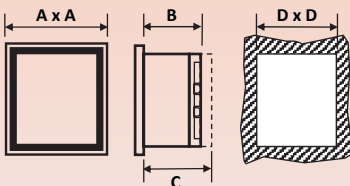


E cl. 1.5

Amperometri elettromagnetici per CA scala 90° intercambiabile AC moving iron ammeters, 90° interchangeable scale



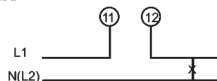
Dimensioni di ingombro e foratura pannello (mm)
Dimensions and panel cut-out (mm)



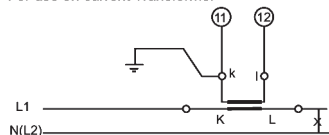
Codice code	A x A	B	C	D x D
E48	48x48	54	63	45x45
E72	72x72	54	63	68x68
E96	96x96	54	63	92x92
E144	144x144	54	63	138x138

Schemi di inserzione Wiring diagrams

Direct - connected



For use on current Transformer



Dati Tecnici

- Precisione	± 1.5 % del valore di fondo scala
- Autoconsumo	1 VA circa (portata 5 A)
- Tensione di riferimento per isolamento	0,6 kV
- Tensione di prova	2 kV (1' a 50 Hz)
- Frequenza di normale funzionamento	45 ÷ 65 Hz
- Sovraccarico permanente	1,2 I _n
- Sovraccarico Istantaneo	10 I _n
- Temperatura di funzionamento	-25°C ÷ +50°C
- Temperatura di magazzino	-40°C ÷ +80°C
- Grado di protezione custodia	IP52
- Grado di protezione morsetti	IP00 senza coprimorsetti / IP20 con coprimorsetti
- Costruzione a norme	CEI, IEC, DIN, VDE

Technical Data

- Accuracy	± 1.5 % of full scale value
- Self-consumption	1 VA approx. (range 5 A)
- Insulation reference voltage	0.6 kV
- Test voltage	2 kV (1' at 50 Hz)
- Operating frequency	45 ÷ 65 Hz
- Continuous overload	1,2 I _n
- Instantaneous overload	10 I _n
- Operating temperature	-25°C ÷ +50°C
- Storage temperature	-40°C ÷ +80°C
- Protection for housing	IP52
- Protection for terminals	IP00 without terminals cover / IP20 with terminals cover
- Manufactured according to	CEI, IEC, DIN, VDE

INSERZIONE DIRETTA / DIRECT INSERTION

PORTATA RANGE	CODICE / CODE			
	48 X 48	72 X 72	96 X 96	144 X 144
1 A	E48001AD	E72001AD	E96001AD	E144001AD
5 A	E48005AD	E72005AD	E96005AD	E144005AD
10 A	E48010AD	E72010AD	E96010AD	E144010AD
15 A	E48015AD	E72015AD	E96015AD	E144015AD
20 A	E48020AD	E72020AD	E96020AD	E144020AD
25 A	E48025AD	E72025AD	E96025AD	E144025AD
30 A	E48030AD	E72030AD	E96030AD	E144030AD
40 A	E48040AD	E72040AD	E96040AD	E144040AD
50 A	-	E72050AD	E96050AD	E144050AD
60 A	-	E72060AD	E96060AD	E144060AD
80 A	-	E72080AD	E96080AD	E144080AD
100 A	-	E72100AD	E96100AD	E144100AD

Per fondo scala 1 In, 2 In o 5 In, aggiungere 1, 2 o 5 alla fine del codice in tabella (Es: E48050AD2, E96100AD5)
For end scale 1 In, 2 In or 5 In, add 1, 2 or 5 at the end of table code (Ex: E48050AD2, E96100AD5)

INSERZIONE SU TA / INSERTION ON CT

PORTATA RANGE	CODICE / CODE			
	48 X 48	72 X 72	96 X 96	144 X 144
1 A ÷ 10 kA / 5 A	E48...A5C	E72...A5C	E96...A5C	E144...A5C
1 A ÷ 10 kA / 1 A	E48...A1C	E72...A1C	E96...A1C	E144...A1C

AMPEROMETRI SENZA SCALA / AMMETERS WITHOUT SCALE

PORTATA RANGE	CODICE / CODE			
	48 X 48	72 X 72	96 X 96	144 X 144
.../5 A	E48SSC5C	E72SSC5C	E96SSC5C	E144SSC5C
.../1 A	E48SSC1C	E72SSC1C	E96SSC1C	E144SSC1C

SCALE INTERCAMBIABILI / INTERCHANGEABLE SCALE

PORTATA RANGE	CODICE / CODE			
	48 X 48	72 X 72	96 X 96	144 X 144
1 A ÷ 10 kA / 5 A	SE48...A5C	SE72...A5C	SE96...A5C	SE144...A5C
1 A ÷ 10 kA / 1 A	SE48...A1C	SE72...A1C	SE96...A1C	SE144...A1C

"..." = valore portata (Es: 50/5 A = E72050A5C, 2000/1 A = E1442K0A1C, 500/5 A = SE96500A5C)

"..." = range value (Ex: 50/5 A = E72050A5C, 2000/1 A = E1442K0A1C, 500/5 A = SE96500A5C)

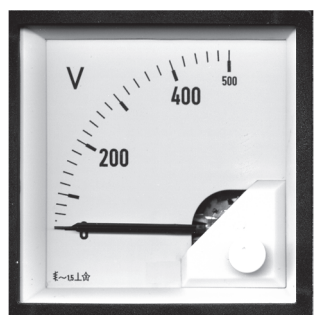
Per fondo scala 1 In, 2 In o 5 In, aggiungere 1, 2 o 5 alla fine del codice in tabella (Es: E48600A5C2, E964K0A1C1)

For end scale 1 In, 2 In or 5 In, add 1, 2 or 5 to the end of table code (Ex: E48600A5C2, E964K0A1C1)

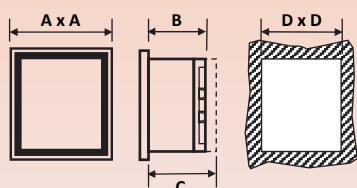


E cl. 1.5

Voltmetri elettromagnetici per CA scala 90° intercambiabile AC moving iron voltmeter, 90° interchangeable scale

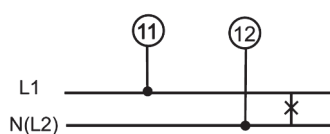


Dimensioni di ingombro e
foratura pannello (mm)
Dimensions and
panel cut-out (mm)



Codice code	A x A	B	C	D x D
E48	48x48	54	63	45x45
E72	72x72	54	63	68x68
E96	96x96	54	63	92x92
E144	144x144	54	63	138x138

Schemi di inserzione
Wiring diagrams



Dati Tecnici

- Precisione	± 1.5 % del valore di fondo scala
- Autoconsumo	1,5 VA circa (portata 100 V)
- Tensione di riferimento per isolamento	0,6 kV
- Tensione di prova	2 kV (1' a 50 Hz)
- Frequenza di normale funzionamento	45 ÷ 65 Hz
- Sovraccarico permanente	1,2 Vn
- Sovraccarico Istantaneo	2 Vn
- Temperatura di funzionamento	-25°C ÷ +50°C
- Temperatura di magazzino	-40°C ÷ +80°C
- Grado di protezione custodia	IP52
- Grado di protezione morsetti	IP00 senza coprimorsetti / IP20 con coprimorsetti
- Costruzione a norme	CEI, IEC, DIN, VDE

Technical Data

- Accuracy	± 1.5 % of full scale value
- Self-consumption	1,5 VA approx. (range 100 V)
- Insulation reference voltage	0.6 kV
- Test voltage	2 kV (1' at 50 Hz)
- Operating frequency	45 ÷ 65 Hz
- Continuous overload	1,2 Vn
- Instantaneous overload	2 Vn
- Operating temperature	-25°C ÷ +50°C
- Storage temperature	-40°C ÷ +80°C
- Protection for housing	IP52
- Protection for terminals	IP00 without terminals cover / IP20 with terminals cover
- Manufactured according to	CEI, IEC, DIN, VDE

INSERZIONE DIRETTA / DIRECT INSERTION

PORTATA RANGE	CODICE / CODE			
	48 X 48	72 X 72	96 X 96	144 X 144
15 V	E48015VD	E72015VD	E96015VD	E144015VD
40 V	E48040VD	E72040VD	E96040VD	E144040VD
50 V	E48050VD	E72050VD	E96050VD	E144050VD
60 V	E48060VD	E72060VD	E96060VD	E144060VD
100 V	E48100VD	E72100VD	E96100VD	E144100VD
150 V	E48150VD	E72150VD	E96150VD	E144150VD
200 V	E48200VD	E72200VD	E96200VD	E144200VD
250 V	E48250VD	E72250VD	E96250VD	E144250VD
300 V	E48300VD	E72300VD	E96300VD	E144300VD
400 V	E48400VD	E72400VD	E96400VD	E144400VD
500 V	E48500VD	E72500VD	E96500VD	E144500VD
600 V	E48600VD	E72600VD	E96600VD	E144600VD

INSERZIONE SU TV / INSERTION ON VT

PORTATA (scala) RANGE (scale)	CODICE / CODE			
	48 X 48	72 X 72	96 X 96	144 X 144
220/100 V (250 V)	E48220100V	E72220100V	E96220100V	E144220100V
230/100 V (250 V)	E48230100V	E72230100V	E96230100V	E144230100V
380/100 V (500 V)	E48380100V	E72380100V	E96380100V	E144380100V
400/100 V (500 V)	E48400100V	E72400100V	E96400100V	E144400100V
440/100 V (500 V)	E48440100V	E72440100V	E96440100V	E144440100V
500/100 V (600 V)	E48500100V	E72500100V	E96500100V	E144500100V
600/100 V (800 V)	E48600100V	E72600100V	E96600100V	E144600100V
690/100 V (800 V)	E48690100V	E72690100V	E96690100V	E144690100V
800/100V (1000V)	E48800100V	E72800100V	E96800100V	E144800100V
1000/100V (1200V)	E481K0100V	E721K0100V	E961K0100V	E1441K0100V
A richiesta on request	E48.....V	E72.....V	E96.....V	E144.....V

Realizzabili altre portate a richiesta
Other ranges available on request



W cl. 1.5

Amperometri a bobina mobile per CC scala 90° intercambiabile DC moving coil ammeters, 90° interchangeable scale



Dati Tecnici

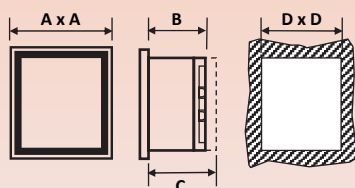
- Precisione $\pm 1.5\%$ del valore di fondo scala
- Autoconsumo 150 mV (50 μ A); 60 mV (10 mA a 40 A)
- Tensione di riferimento per isolamento 0,6 kV
- Tensione di prova 2 kV (1' a 50 Hz)
- Sovraccarico permanente 1,2 In
- Sovraccarico Istantaneo 10 In
- Temperatura di funzionamento $-25^\circ\text{C} \div +50^\circ\text{C}$
- Temperatura di magazzino $-40^\circ\text{C} \div +80^\circ\text{C}$
- Grado di protezione custodia IP52
- Grado di protezione morsetti IP00 senza coprimorsetti / IP20 con coprimorsetti
- Costruzione a norme CEI, IEC, DIN, VDE

Technical Data

- Accuracy $\pm 1.5\%$ of full scale value
- Self-consumption 150 mV (50 μ A); 60 mV (10 mA a 40 A)
- Insulation reference voltage 0.6 kV
- Test voltage 2 kV (1' at 50 Hz)
- Continuous overload 1,2 In
- Instantaneous overload 10 In
- Operating temperature $-25^\circ\text{C} \div +50^\circ\text{C}$
- Storage temperature $-40^\circ\text{C} \div +80^\circ\text{C}$
- Protection for housing IP52
- Protection for terminals IP00 without terminals cover / IP20 with terminals cover
- Manufactured according to CEI, IEC, DIN, VDE

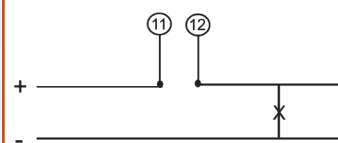
Dimensioni di ingombro e foratura pannello (mm)

Dimensions and panel cut-out (mm)



Codice code	A x A	B	C	D x D
W48	48x48	54	63	45x45
W72	72x72	54	63	68x68
W96	96x96	54	63	92x92
W144	144x144	54	63	138x138

Schemi di inserzione Wiring diagrams



PORTATA RANGE	CODICE / CODE			
	48 X 48	72 X 72	96 X 96	144 X 144
15 μ A	W48015UA	W72015UA	W96015UA	W144015UA
25 μ A	W48025UA	W72025UA	W96025UA	W144025UA
50 μ A	W48050UA	W72050UA	W96050UA	W144050UA
100 μ A	W48100UA	W72100UA	W96100UA	W144100UA
150 μ A	W48150UA	W72150UA	W96150UA	W144150UA
250 μ A	W48250UA	W72250UA	W96250UA	W144250UA
400 μ A	W48400UA	W72400UA	W96400UA	W144400UA
600 μ A	W48600UA	W72600UA	W96600UA	W144600UA
1 mA	W48001MA	W72001MA	W96001MA	W144001MA
5 mA	W48005MA	W72005MA	W96005MA	W144005MA
10 mA	W48010MA	W72010MA	W96010MA	W144010MA
20 mA	W48020MA	W72020MA	W96020MA	W144020MA
4-20 mA	W48420MA	W72420MA	W96420MA	W144420MA
100 mA	W48100MA	W72100MA	W96100MA	W144100MA
150 mA	W48150MA	W72150MA	W96150MA	W144150MA
250 mA	W48250MA	W72250MA	W96250MA	W144250MA
600 mA	W48600MA	W72600MA	W96600MA	W144600MA
1 A	W48001AD	W72001AD	W96001AD	W144001AD
1,5 A	W48105AD	W72105AD	W96105AD	W144105AD
2,5 A	W48205AD	W72205AD	W96205AD	W144205AD
4 A	W48004AD	W72004AD	W96004AD	W144004AD
5 A	W48005AD	W72005AD	W96005AD	W144005AD
6 A	W48006AD	W72006AD	W96006AD	W144006AD
10 A	W48010AD	W72010AD	W96010AD	W144010AD
15 A	W48015AD	W72015AD	W96015AD	W144015AD
20 A	W48020AD	W72020AD	W96020AD	W144020AD
25 A	W48025AD	W72025AD	W96025AD	W144025AD
30 A	W48030AD	W72030AD	W96030AD	W144030AD
40 A	W48040AD	W72040AD	W96040AD	W144040AD
50 A	W48050AD	W72050AD	W96050AD	W144050AD
60 A	W48060AD	W72060AD	W96060AD	W144060AD
80 A	-	W72080AD	W96080AD	W144080AD
100 A	-	W72100AD	W96100AD	W144100AD
1 A $\div$ 15 kA / 60 mV	W48...A60MV	W72...A60MV	W96...A60MV	W144...A60MV
$\pm(1 \text{ A} \div 15 \text{ kA}) / \pm 60 \text{ mV}$	W48...A60MVB	W72...A60MVB	W96...A60MVB	W144...A60MVB
1 A $\div$ 15 kA / 100 mV	W48...A100MV	W72...A100MV	W96...A100MV	W144...A100MV
1 A $\div$ 15 kA / 150 mV	W48...A150MV	W72...A150MV	W96...A150MV	W144...A150MV

"..." = valore portata (Es: 10 A/60 mV = W48010A60MV, 2000 A/100 mV = W961K0A100MV, $\pm 500 \text{ A} / \pm 60 \text{ mV} = \text{W72500A60MVB}$)

"..." = range value (Ex: 10 A/60 mV = W48010A60MV, 2000 A/100 mV = W961K0A100MV, $\pm 500 \text{ A} / \pm 60 \text{ mV} = \text{W72500A60MVB}$)

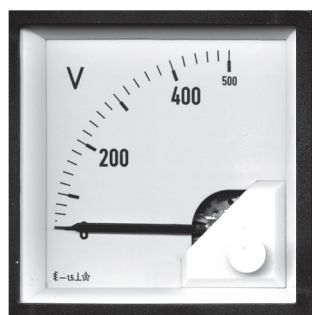
Realizzabili altre portate a richiesta

Other ranges available on request

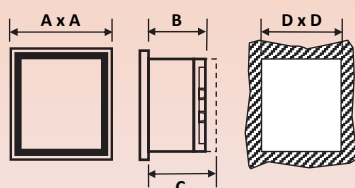


W cl. 1.5

Voltmetri a bobina mobile per CC scala 90° intercambiabile DC moving coil voltmeters, 90° interchangeable scale

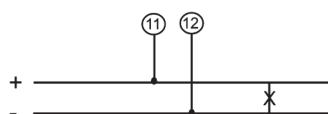


**Dimensioni di ingombro e
foratura pannello (mm)**
*Dimensions and
panel cut-out (mm)*



Codice code	A x A	B	C	D x D
W48	48x48	54	63	45x45
W72	72x72	54	63	68x68
W96	96x96	54	63	92x92
W144	144x144	54	63	138x138

Schemi di inserzione
Wiring diagrams



Dati Tecnici

- Precisione	± 1.5 % del valore di fondo scala
- Autoconsumo	1 mA (1000 Ω / V) circa
- Tensione di riferimento per isolamento	0,6 kV
- Tensione di prova	2 kV (1' a 50 Hz)
- Sovraccarico permanente	1,2 Vn
- Sovraccarico Istantaneo	2 Vn
- Temperatura di funzionamento	-25°C ÷ +50°C
- Temperatura di magazzino	-40°C ÷ +80°C
- Grado di protezione custodia	IP52
- Grado di protezione morsetti	IP00 senza coprimorsetti / IP20 con coprimorsetti
- Costruzione a norme	CEI, IEC, DIN, VDE

Technical Data

- Accuracy	± 1.5 % of full scale value
- Self-consumption	1 mA (1000 Ω / V) circa
- Insulation reference voltage	0.6 kV
- Test voltage	2 kV (1' at 50 Hz)
- Continuous overload	1,2 Vn
- Instantaneous overload	2 Vn
- Operating temperature	-25°C ÷ +50°C
- Storage temperature	-40°C ÷ +80°C
- Protection for housing	IP52
- Protection for terminals	IP00 without terminals cover / IP20 with terminals cover
- Manufactured according to	CEI, IEC, DIN, VDE

INSERZIONE DIRETTA / DIRECT INSERTION

PORTATA RANGE	CODICE / CODE			
	48 X 48	72 X 72	96 X 96	144 X 144
25 mV	W48025MVD	W72025MVD	W96025MVD	W144025MVD
40 mV	W48040MVD	W72040MVD	W96040MVD	W144040MVD
60 mV	W48060MVD	W72060MVD	W96060MVD	W144060MVD
100 mV	W48100MVD	W72100MVD	W96100MVD	W144100MVD
150 mV	W48150MVD	W72150MVD	W96150MVD	W144150MVD
300 mV	W48300MVD	W72300MVD	W96300MVD	W144300MVD
500 mV	W48500MVD	W72500MVD	W96500MVD	W144500MVD
1 V	W48001VD	W72001VD	W96001VD	W144001VD
2,5 V	W48002VD	W72002VD	W96002VD	W144002VD
5 V	W48005VD	W72005VD	W96005VD	W144005VD
10 V	W48010VD	W72010VD	W96010VD	W144010VD
15 V	W48015VD	W72015VD	W96015VD	W144015VD
25 V	W48025VD	W72025VD	W96025VD	W144025VD
40 V	W48040VD	W72040VD	W96040VD	W144040VD
60 V	W48060VD	W72060VD	W96060VD	W144060VD
100 V	W48100VD	W72100VD	W96100VD	W144100VD
150 V	W48150VD	W72150VD	W96150VD	W144150VD
250 V	W48250VD	W72250VD	W96250VD	W144250VD
400 V	W48400VD	W72400VD	W96400VD	W144400VD
500 V	W48500VD	W72500VD	W96500VD	W144500VD
600 V	W48600VD	W72600VD	W96600VD	W144600VD

INSERZIONE SU DIVISORE / INSERTION ON VOLTAGE DIVIDER (100 V - 1 mA)

PORTATA (scala) RANGE (scale)	CODICE / CODE			
	48 X 48	72 X 72	96 X 96	144 X 144
500/100 V (500 V)	W48500100V	W72500100V	W96500100V	W144500100V
700/100 V (700 V)	W48700100V	W72700100V	W96700100V	W144700100V
1000/100 V (1000 V)	W481K0100V	W721K0100V	W961K0100V	W1441K0100V
1500/100 V (1500 V)	W481K5100V	W721K5100V	W961K5100V	W1441K5100V
2000/100 V (2000V)	W482K0100V	W722K0100V	W962K0100V	W1442K0100V
2500/100 V (2500V)	W482K5100V	W722K5100V	W962K5100V	W1442K5100V
3000/100 V (3000 V)	W483K0100V	W723K0100V	W963K0100V	W1443K0100V
4000/100 V (4000V)	W484K0100V	W724K0100V	W964K0100V	W1444K0100V
5000/100 V (5000V)	W485K0100V	W725K0100V	W965K0100V	W1445K0100V
A richiesta on request	W48...100V	W72...100V	W96...100V	W144...100V

"..." = valore portata (Es: 800/100 V = W48800100V, 1200/100V = W961K2100V)

"..." = range value (Ex: 800/100V = W48800100V, 1200/100V = W961K2100V)

Realizzabili altre portate a richiesta

Other ranges available on request

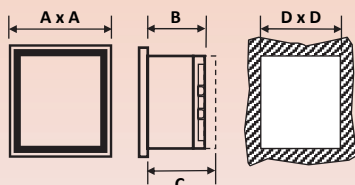


WL cl. 1.5

Amperometri a bobina mobile per CC scala 240° intercambiabile
DC moving coil ammeters, 240° interchangeable scale

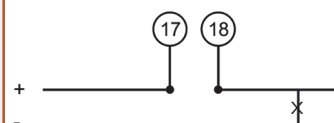


Dimensioni di ingombro e foratura pannello (mm)
Dimensions and panel cut-out (mm)



Codice code	A x A	B	C	D x D
WL48	48x48	54	63	45x45
WL72	72x72	54	63	68x68
WL96	96x96	54	63	92x92
WL144	144x144	54	63	138x138

Schemi di inserzione
Wiring diagrams



Dati Tecnici

- Precisione $\pm 1.5\%$ del valore di fondo scala
- Autoconsumo 100 mV (100 μ A); 60 mV (10 mA a 6 A)
- Tensione di riferimento per isolamento 0,6 kV
- Tensione di prova 2 kV (1' a 50 Hz)
- Sovraccarico permanente 1,2 In
- Sovraccarico Istantaneo 10 In
- Temperatura di funzionamento $-25^{\circ}\text{C} \div +50^{\circ}\text{C}$
- Temperatura di magazzino $-40^{\circ}\text{C} \div +80^{\circ}\text{C}$
- Grado di protezione custodia IP52
- Grado di protezione morsetti IP00 senza coprimorsetti / IP20 con coprimorsetti
- Costruzione a norme CEI, IEC, DIN, VDE

Technical Data

- Accuracy $\pm 1.5\%$ of full scale value
- Self-consumption 100 mV (100 μ A); 60 mV (10 mA a 6 A)
- Insulation reference voltage 0.6 kV
- Test voltage 2 kV (1' at 50 Hz)
- Continuous overload 1,2 In
- Instantaneous overload 10 In
- Operating temperature $-25^{\circ}\text{C} \div +50^{\circ}\text{C}$
- Storage temperature $-40^{\circ}\text{C} \div +80^{\circ}\text{C}$
- Protection for housing IP52
- Protection for terminals IP00 without terminals cover / IP20 with terminals cover
- Manufactured according to CEI, IEC, DIN, VDE

PORTATA RANGE	CODICE / CODE			
	48 X 48	72 X 72	96 X 96	144 X 144
50 μ A	WL48050UA	WL72050UA	WL96050UA	WL144050UA
100 μ A	WL48100UA	WL72100UA	WL96100UA	WL144100UA
150 μ A	WL48150UA	WL72150UA	WL96150UA	WL144150UA
250 μ A	WL48250UA	WL72250UA	WL96250UA	WL144250UA
400 μ A	WL48400UA	WL72400UA	WL96400UA	WL144400UA
600 μ A	WL48600UA	WL72600UA	WL96600UA	WL144600UA
1 mA	WL48001MA	WL72001MA	WL96001MA	WL144001MA
5 mA	WL481005MA	WL72005MA	WL96005MA	WL144005MA
10 mA	WL48010MA	WL72010MA	WL96010MA	WL144010MA
20 mA	WL48020MA	WL72020MA	WL96020MA	WL144020MA
4-20 mA	WL48420MA	WL72420MA	WL96420MA	WL144420MA
100 mA	WL48100MA	WL72100MA	WL96100MA	WL144100MA
150 mA	WL48150MA	WL72150MA	WL96150MA	WL144150MA
250 mA	WL48250MA	WL72250MA	WL96250MA	WL144250MA
600 mA	WL48600MA	WL72600MA	WL96600MA	WL144600MA
1 A	WL48001AD	WL72001AD	WL96001AD	WL144001AD
1,5 A	WL48105AD	WL72105AD	WL96105AD	WL144105AD
2,5 A	WL48205AD	WL72205AD	WL96205AD	WL144205AD
4 A	WL48004AD	WL72004AD	WL96004AD	WL144004AD
5 A	WL48005AD	WL72005AD	WL96005AD	WL144005AD
6 A	WL48006AD	WL72006AD	WL96006AD	WL144006AD
10 A	WL48010AD	WL72010AD	WL96010AD	WL144010AD
15 A	WL48015AD	WL72015AD	WL96015AD	WL144015AD
20 A	WL48020AD	WL72020AD	WL96020AD	WL144020AD
25 A	WL48025AD	WL72025AD	WL96025AD	WL144025AD
30 A	WL48030AD	WL72030AD	WL96030AD	WL144030AD
40 A	WL48040AD	WL72040AD	WL96040AD	WL144040AD
50 A	WL48050AD	WL72050AD	WL96050AD	WL144050AD
60 A	WL48060AD	WL72060AD	WL96060AD	WL144060AD
80 A	-	WL72080AD	WL96080AD	WL144080AD
100 A	-	WL72100AD	WL96100AD	WL144100AD
1 A $\div$ 15 kA / 60 mV	WL48...A60MV	WL72...A60MV	WL96...A60MV	WL144...A60MV
± 1 A $\div$ 15 kA / ± 60 mV	WL48...A60MVB	WL72...A60MVB	WL96...A60MVB	WL144...A60MVB
1 A $\div$ 15 kA / 100 mV	WL48...A100MV	WL72...A100MV	WL96...A100MV	WL144...A100MV
1 A $\div$ 15 kA / 150 mV	WL48...A150MV	WL72...A150MV	WL96...A150MV	WL144...A150MV

"..." = valore portata (Es: 10 A/60 mV = WL48010A60MV, 2000 A/100 mV = WL961K0A100MV, ± 500 A/ ± 60 mV = WL72500A60MVB)

"..." = range value (Ex: 10 A/60 mV = WL48010A60MV, 2000 A/100 mV = WL961K0A100MV, ± 500 A/ ± 60 mV = WL72500A60MVB)

Realizzabili altre portate a richiesta

Other ranges available on request

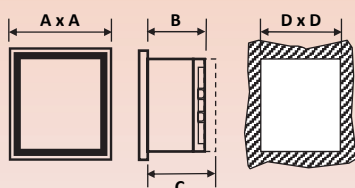


WL cl. 1.5

Voltmetri a bobina mobile per CC scala 240° intercambiabile
DC moving coil voltmeters, 240° interchangeable scale

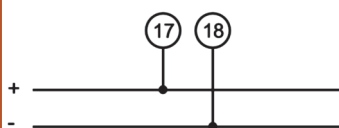


Dimensioni di ingombro e foratura pannello (mm)
Dimensions and panel cut-out (mm)



Codice code	A x A	B	C	D x D
WL48	48x48	54	63	45x45
WL72	72x72	54	63	68x68
WL96	96x96	54	63	92x92
WL144	144x144	54	63	138x138

Schemi di inserzione
Wiring diagrams



Dati Tecnici

- Precisione	± 1.5 % del valore di fondo scala
- Autoconsumo	1 mA (1000 Ω / V) circa
- Tensione di riferimento per isolamento	0,6 kV
- Tensione di prova	2 kV (1' a 50 Hz)
- Sovraccarico permanente	1,2 Vn
- Sovraccarico Istantaneo	2 Vn
- Temperatura di funzionamento	-25°C ÷ +50°C
- Temperatura di magazzino	-40°C ÷ +80°C
- Grado di protezione custodia	IP52
- Grado di protezione morsetti	IP00 senza coprimorsetti / IP20 con coprimorsetti
- Costruzione a norme	CEI, IEC, DIN, VDE

Technical Data

- Accuracy	± 1.5 % of full scale value
- Self-consumption	1 mA (1000 Ω / V) circa
- Insulation reference voltage	0.6 kV
- Test voltage	2 kV (1' at 50 Hz)
- Continuous overload	1,2 Vn
- Instantaneous overload	2 Vn
- Operating temperature	-25°C ÷ +50°C
- Storage temperature	-40°C ÷ +80°C
- Protection for housing	IP52
- Protection for terminals	IP00 without terminals cover / IP20 with terminals cover
- Manufactured according to	CEI, IEC, DIN, VDE

INSERZIONE DIRETTA / DIRECT INSERTION

PORTATA RANGE	CODICE / CODE			
	48 X 48	72 X 72	96 X 96	144 X 144
60 mV	W48060MVD	W72060MVD	W96060MVD	W144060MVD
100 mV	W48100MVD	W72100MVD	W96100MVD	W144100MVD
150 mV	W48150MVD	W72150MVD	W96150MVD	W144150MVD
300 mV	W48300MVD	W72300MVD	W96300MVD	W144300MVD
500 mV	W48500MVD	W72500MVD	W96500MVD	W144500MVD
1 V	W48001VD	W72001VD	W96001VD	W144001VD
2,5 V	W48002VD	W72002VD	W96002VD	W144002VD
5 V	W48005VD	W72005VD	W96005VD	W144005VD
10 V	W48010VD	W72010VD	W96010VD	W144010VD
15 V	W48015VD	W72015VD	W96015VD	W144015VD
25 V	W48025VD	W72025VD	W96025VD	W144025VD
40 V	W48040VD	W72040VD	W96040VD	W144040VD
60 V	W48060VD	W72060VD	W96060VD	W144060VD
100 V	W48100VD	W72100VD	W96100VD	W144100VD
150 V	W48150VD	W72150VD	W96150VD	W144150VD
250 V	W48250VD	W72250VD	W96250VD	W144250VD
400 V	W48400VD	W72400VD	W96400VD	W144400VD
500 V	W48500VD	W72500VD	W96500VD	W144500VD
600 V	W48600VD	W72600VD	W96600VD	W144600VD

INSERZIONE SU DIVISORE / INSERTION ON VOLTAGE DIVIDER (100 V - 1 mA)

PORTATA (scala) RANGE (scale)	CODICE / CODE			
	48 X 48	72 X 72	96 X 96	144 X 144
500/100 V (500 V)	W48500100V	W72500100V	W96500100V	W144500100V
700/100 V (700 V)	W48700100V	W72700100V	W96700100V	W144700100V
1000/100 V (1000 V)	W481K0100V	W721K0100V	W961K0100V	W1441K0100V
1500/100 V (1500 V)	W481K5100V	W721K5100V	W961K5100V	W1441K5100V
2000/100 V (2000V)	W482K0100V	W722K0100V	W962K0100V	W1442K0100V
2500/100 V (2500V)	W482K5100V	W722K5100V	W962K5100V	W1442K5100V
3000/100 V (3000 V)	W483K0100V	W723K0100V	W963K0100V	W1443K0100V
4000/100 V (4000V)	W484K0100V	W724K0100V	W964K0100V	W1444K0100V
5000/100 V (5000V)	W485K0100V	W725K0100V	W965K0100V	W1445K0100V
A richiesta on request	W48...100V	W72...100V	W96...100V	W144...100V

"..." = valore portata (Es: 800/100 V = W48800100V, 1200/100V = W961K2100V)

"..." = range value (Ex: 800/100V = W48800100V, 1200/100V = W961K2100V)

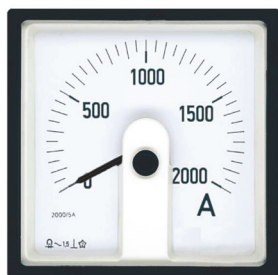
Realizzabili altre portate a richiesta

Other ranges available on request



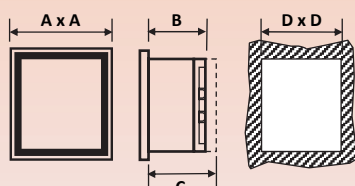
WLR cl. 1.5

Amperometri a bobina mobile con raddrizzatore per CA scala 240° intercambiabile
AC moving coil ammeters with rectifier, 240° interchangeable scale



I valori indicati sul TA.../5 A valgono anche per i TA.../1 A
The values indicate for CT.../5 A are the same for CT.../1 A

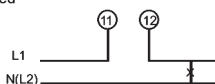
Dimensioni di ingombro e foratura pannello (mm)
Dimensions and panel cut-out (mm)



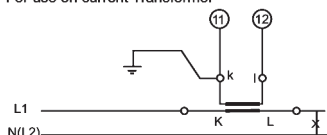
Codice code	A x A	B	C	D x D
WLR48	48x48	54	63	45x45
WLR72	72x72	54	63	68x68
WLR96	96x96	54	63	92x92
WLR144	144x144	54	63	138x138

Schemi di inserzione Wiring diagrams

Direct - connected



For use on current Transformer



Dati Tecnici

- Precisione $\pm 1.5\%$ del valore di fondo scala
- Autoconsumo 1 VA circa (portata 5 A)
- Tensione di riferimento per isolamento 0,6 kV
- Tensione di prova 2 kV (1' a 50 Hz)
- Frequenza di normale funzionamento 45 ÷ 65 Hz
- Sovraccarico permanente 1,2 In
- Sovraccarico Istantaneo 10 In
- Temperatura di funzionamento -25°C ÷ +50°C
- Temperatura di magazzino -40°C ÷ +80°C
- Grado di protezione custodia IP52
- Grado di protezione morsetti IP00 senza coprimorsetti / IP20 con coprimorsetti
- Costruzione a norme CEI, IEC, DIN, VDE

Technical Data

- Accuracy $\pm 1.5\%$ of full scale value
- Self-consumption 1 VA approx. (range 5 A)
- Insulation reference voltage 0.6 kV
- Test voltage 2 kV (1' at 50 Hz)
- Operating frequency 45 ÷ 65 Hz
- Continuous overload 1,2 In
- Instantaneous overload 10 In
- Operating temperature -25°C ÷ +50°C
- Storage temperature -40°C ÷ +80°C
- Protection for housing IP52
- Protection for terminals IP00 without terminals cover / IP20 with terminals cover
- Manufactured according to CEI, IEC, DIN, VDE

INSERZIONE DIRETTA / DIRECT INSERTION

PORTATA RANGE	CODICE / CODE			
	48 X 48	72 X 72	96 X 96	144 X 144
0,5 A	WLR48000AD	WLR72000AD	WLR96000AD	WLR144000AD
1 A	WLR48001AD	WLR72001AD	WLR96001AD	WLR144001AD
5 A	WLR48005AD	WLR72005AD	WLR96005AD	WLR144005AD
10 A	WLR48010AD	WLR72010AD	WLR96010AD	WLR144010AD

1 In o 2 In o 5 In : per fondo scala 1 In, 2 In o 5 In aggiungere 1, 2 o 5 alla fine del codice in tabella

(Es: WLR72010AD1, WLR96001AD5)

1 In or 2 In or 5 In : for end scale 1 In, 2 In or 5 In add 1, 2 or 5 to the end of table code

(Ex: WLR72010AD1, WLR96001AD5)

INSERZIONE SU TA / INSERTION ON CT

PORTATA RANGE	CODICE / CODE			
	48 X 48	72 X 72	96 X 96	144 X 144
1 A ÷ 10 kA / 5 A	WLR48...A5C	WLR72...A5C	WLR96...A5C	WLR144...A5C
1 A ÷ 10 kA / 1 A	WLR48...A1C	WLR72...A1C	WLR96...A1C	WLR144...A1C

AMPEROMETRI SENZA SCALA / AMMETERS WITHOUT SCALE

PORTATA RANGE	CODICE / CODE			
	48 X 48	72 X 72	96 X 96	144 X 144
.../5 A	WLR48SSC5C	WLR72SSC5C	WLR96SSC5C	WLR144SSC5C
.../1 A	WLR48SSC1C	WLR72SSC1C	WLR96SSC1C	WLR144SSC1C

SCALE INTERCAMBIABILI / INTERCHANGEABLE SCALE

PORTATA RANGE	CODICE / CODE			
	48 X 48	72 X 72	96 X 96	144 X 144
1 A ÷ 10 kA / 5 A	SWLR48...A5C	SWLR72...A5C	SWLR96...A5C	SWLR144...A5C
1 A ÷ 10 kA / 1 A	SWLR48...A1C	SWLR72...A1C	SWLR96...A1C	SWLR144...A1C

"..." = valore portata (Es: 50/5 A = WLR72050A5C, 2000/1 A = WLR1442K0A1C, 500/5 A = SWLR96500A5C)

"..." = range value (Ex: 50/5 A = WLR72050A5C, 2000/1 A = WLR1442K0A1C, 500/5 A = SWLR96500A5C)

1 In o 2 In o 5 In : per fondo scala 1 In, 2 In o 5 In aggiungere 1, 2 o 5 alla fine del codice in tabella

(Es: WLR48600A5C2, WLR964K0A1C1)

1 In or 2 In or 5 In : for end scale 1 In, 2 In or 5 In add 1, 2 or 5 to the end of table code

(Ex: WLR48600A5C2, WLR964K0A1C1)



WLR

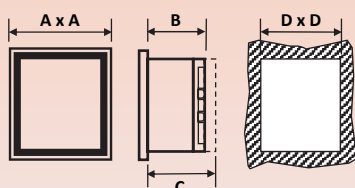
cl. 1.5

Voltmetri a bobina mobile con raddrizzatore per CA scala 240° intercambiabile

AC moving coil voltmeters with rectifier, 240° interchangeable scale

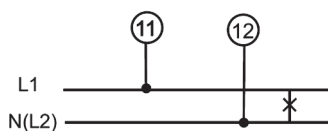


Dimensioni di ingombro e foratura pannello (mm)
Dimensions and panel cut-out (mm)



Codice code	A x A	B	C	D x D
WLR48	48x48	54	64	45x45
WLR72	72x72	54	64	68x68
WLR96	96x96	54	64	92x92
WLR144	144x144	54	64	138x138

Schemi di inserzione
Wiring diagrams



Dati Tecnici

- Precisione	± 1.5 % del valore di fondo scala
- Autoconsumo	1,5 VA circa (portata 100 V)
- Tensione di riferimento per isolamento	0,6 kV
- Tensione di prova	2 kV (1' a 50 Hz)
- Frequenza di normale funzionamento	45 ÷ 65 Hz
- Sovraccarico permanente	1,2 Vn
- Sovraccarico Istantaneo	2 Vn
- Temperatura di funzionamento	-25°C ÷ +50°C
- Temperatura di magazzino	-40°C ÷ +80°C
- Grado di protezione custodia	IP52
- Grado di protezione morsetti	IP00 senza coprimorsetti / IP20 con coprimorsetti
- Costruzione a norme	CEI, IEC, DIN, VDE

Technical Data

- Accuracy	± 1.5 % of full scale value
- Self-consumption	1,5 VA approx. (range 100 V)
- Insulation reference voltage	0.6 kV
- Test voltage	2 kV (1' at 50 Hz)
- Operating frequency	45 ÷ 65 Hz
- Continuous overload	1,2 Vn
- Instantaneous overload	2 Vn
- Operating temperature	-25°C ÷ +50°C
- Storage temperature	-40°C ÷ +80°C
- Protection for housing	IP52
- Protection for terminals	IP00 without terminals cover / IP20 with terminals cover
- Manufactured according to	CEI, IEC, DIN, VDE

INSERZIONE DIRETTA / DIRECT INSERTION

PORTATA RANGE	CODICE / CODE			
	48 X 48	72 X 72	96 X 96	144 X 144
15 V	WLR48015VD	WLR72015VD	WLR96015VD	WLR144015VD
40 V	WLR48040VD	WLR72040VD	WLR96040VD	WLR144040VD
50 V	WLR48050VD	WLR72050VD	WLR96050VD	WLR144050VD
60 V	WLR48060VD	WLR72060VD	WLR96060VD	WLR144060VD
100 V	WLR48100VD	WLR72100VD	WLR96100VD	WLR144100VD
150 V	WLR48150VD	WLR72150VD	WLR96150VD	WLR144150VD
200 V	WLR48200VD	WLR72200VD	WLR96200VD	WLR144200VD
250 V	WLR48250VD	WLR72250VD	WLR96250VD	WLR144250VD
300 V	WLR48300VD	WLR72300VD	WLR96300VD	WLR144300VD
400 V	WLR48400VD	WLR72400VD	WLR96400VD	WLR144400VD
500 V	WLR48500VD	WLR72500VD	WLR96500VD	WLR144500VD
600 V	WLR48600VD	WLR72600VD	WLR96600VD	WLR144600VD

INSERZIONE SU TV / INSERTION ON VT

PORTATA (scala) RANGE (scale)	CODICE / CODE			
	48 X 48	72 X 72	96 X 96	144 X 144
220/100 V (250 V)	WLR48220100V	WLR72220100V	WLR96220100V	WLR144220100V
230/100 V (250 V)	WLR48230100V	WLR72230100V	WLR96230100V	WLR144230100V
380/100 V (500 V)	WLR48380100V	WLR72380100V	WLR96380100V	WLR144380100V
400/100 V (500 V)	WLR48400100V	WLR72400100V	WLR96400100V	WLR144400100V
440/100 V (500 V)	WLR48440100V	WLR72440100V	WLR96440100V	WLR144440100V
500/100 V (600 V)	WLR48500100V	WLR72500100V	WLR96500100V	WLR144500100V
600/100 V (800 V)	WLR48600100V	WLR72600100V	WLR96600100V	WLR144600100V
690/100 V (800 V)	WLR48690100V	WLR72690100V	WLR96690100V	WLR144690100V
800/100V (1000V)	WLR48800100V	WLR72800100V	WLR96800100V	WLR144800100V
1000/100V (1200V)	WLR481K0100V	WLR721K0100V	WLR961K0100V	WLR1441K0100V
A richiesta on request	WLR48.....V	WLR72.....V	WLR96.....V	WLR144.....V

Realizzabili altre portate a richiesta
 Other ranges available on request