

RLW Reactors

Technical Reference Manual



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RLW Reactors

Technical Reference Manual

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Standard Delivery Schedule

Open Types

Stock - 2 weeks (Quantity 1 – 4)
1 - 4 weeks (Quantity 5 - 20)
Consult factory for larger quantities

0. 5 thru 750 AMP

NEMA 1, and 3R enclosed reactors

Special order (Quantity 1 – 4)
Special order (Quantity 5 - 20)

0. 5 thru 750 AMP

Consult factory for delivery dates

Non-Standard product requests

Complete page 37 and Consult factory

Above schedule is based on normal manufacturing conditions. Unforeseen issues in materials or manufacturing backlog may affect above standard delivery schedule. Please contact factory for actual delivery.

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Selection & Application Guide

The MTE World reactor (RLW) is an international product that is optimized to support global IEC and NEC Drive /motor applications and provides a low cost line side alternative to the present line of MTE “RL” line/ load reactors. RLW’s are RMS current rated impedance devices. Selection is based on the choice of inductance correlated to the application motor full load amps, voltage and frequency and the number of phases. Use the selection table based on input voltage and NEC FLA motor selection table for common voltages. For critical impedance selection based on specific HP or load currents consult MTE applications engineering.

Single phase applications: The RLW like RL reactors may also be sized to protect single phase drives. Please see MTE application **AN0120** for details

Load side applications require use of the reactor output selection tables.

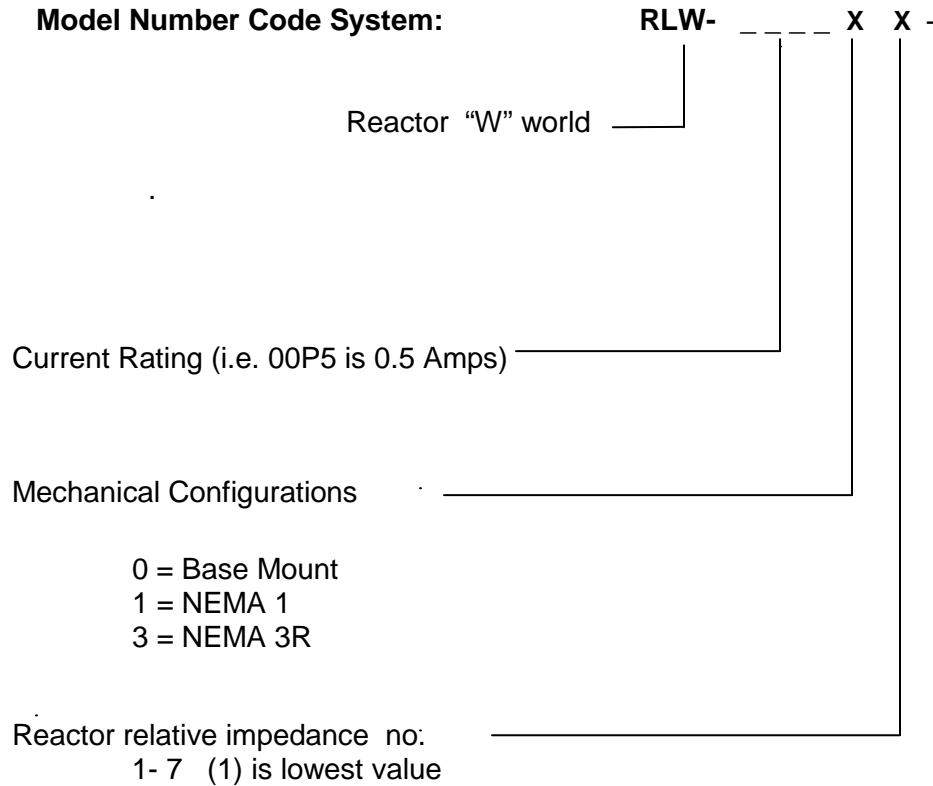
Choose the impedance level:

- 1.5% Minimum impedance for reduction of low level voltage transients. RLW reactors may be used as a supplement to already installed reactors.
- 3% Helps minimize (95%) most drive nuisance tripping and faults caused by over voltage and input line disturbances. 3% is typical impedance specified by most drive manufacturers.
- 5% The MTE recommended value to protect drive components from transient overvoltage, prevents (99.9%) nuisance trips, and offers limited harmonic protection to input line power from drive inducted harmonics.

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Model Code Part Number Configuration



Options:

- KIT- 0038 = DIN Rail Mount
- KIT-0039 = RL conversion Plate
- KIT-0040 = Vibration Pads

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RL Reactor cross to RLW

Amps	RL Part No.	RLW Input PN	RLW Output PN	Amps	RL Part No.	RLW Input PN	RLW Output PN
1	RL-00101	RLW-00P506	RLW-01P106	80	RL-08001	RLW-008301	RLW-010403
	RL-00102	RLW-01P106	RLW-01P106		RL-08002	RLW-008305	RLW-010405
	RL-00103	RLW-01P105	RLW-01P105		RL-08003	RLW-008305	RLW-010405
	RL-00104	RLW-01P103	RLW-01P103		RL-10001	RLW-010401	RLW-013003
2	RL-00201	RLW-02P103	RLW-03P405	100	RL-10002	RLW-010403	RLW-013005
	RL-00202	RLW-02P105	RLW-03P406		RL-10003	RLW-010405	RLW-013005
	RL-00203	RLW-02P106	RLW-03P406		RL-13001	RLW-013001	RLW-016001
	RL-00204	RLW-02P101	RLW-03P403	130	RL-13002	RLW-013003	RLW-016003
4	RL-00401	RLW-04P801	RLW-04P801		RL-13003	RLW-013005	RLW-016005
	RL-00402	RLW-04P805	RLW-04P805	160	RL-16001	RLW-016001	RLW-020001
	RL-00403	RLW-04P806	RLW-04P806		RL-16002	RLW-016003	RLW-020003
	RL-00404	RLW-04P806	RLW-04P806		RL-16003	RLW-016005	RLW-020005
8	RL-00801	RLW-07P601	RLW-001101	200	RL-20001B14	RLW-020001	RLW-025001
	RL-00802	RLW-07P603	RLW-001105		RL-20002B14	RLW-020003	RLW-025003
	RL-00803	RLW-07P605	RLW-001106		RL-20003B14	RLW-020005	RLW-025005
	RL-00804	RLW-07P606	RLW-001106		RL-25001B14	RLW-025001	RLW-032201
12	RL-01201	RLW-001101	RLW-001403	250	RL-25002B14	RLW-025003	RLW-032203
	RL-01202	RLW-001103	RLW-001405		RL-25003B14	RLW-025005	RLW-032205
	RL-01203	RLW-001106	RLW-001406		RL-32001B14	RLW-032201	RLW-041401
18	RL-01801	RLW-001401	RLW-002101	320	RL-32002B14	RLW-032203	RLW-041403
	RL-01802	RLW-001403	RLW-002105		RL-32003B14	RLW-032205	RLW-041405
	RL-01803	RLW-001405	RLW-002106		RL-40001B14	RLW-041401	RLW-051501
25	RL-02501	RLW-002101	RLW-002801	400	RL-40002B14	RLW-041403	RLW-051503
	RL-02502	RLW-002103	RLW-002805		RL-40003B14	RLW-041405	RLW-051505
	RL-02503	RLW-002105	RLW-002806		RL-50001B14	RLW-051501	RLW-060001
	RL-03501	RLW-003501	RLW-004601		500	RL-50002	RLW-051503
RL-03502	RLW-003503	RLW-004605	RL-50003	RLW-051505		RLW-060005	
RL-03503	RLW-003505	RLW-004605	RL-60001	RLW-060001		RLW-075001	
45	RL-04501	RLW-004601	RLW-005501	600	RL-60002	RLW-060003	RLW-075003
	RL-04502	RLW-004603	RLW-005505		RL-60003	RLW-060005	RLW-075005
	RL-04503	RLW-004605	RLW-005505		RL-75001	RLW-075001	
55	RL-05501	RLW-005501	RLW-006501	750	RL-75002	RLW-075003	
	RL-05502	RLW-005503	RLW-006503		RL-75003	RLW-075005	
	RL-05503	RLW-005505	RLW-006505				

Note:

1. The RLW was designed to support global IEC and NEC input VFD drive motor applications. To gain optimum performance and size advantages use the RLW selections tables by HP and voltage on the following pages.

2. RLW output selection is based on 80% of fundamental RLW current capacity for output load applications up to 100 foot motor leads!

3. Cross reference is based on RL reactors used for 480 vac NEC FLA applications



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Input Selection Guide by HP/KW and Voltage

Open and NEMA 1

Input Selection Guide by HP and 208 Volts

HP @ 208 V 60Hz	FLA	3% Impedance		5% Impedance	
		Open	NEMA 1	Open	NEMA 1
0.25	1.4	RLW-01P601	RLW-01P611	RLW-02P103	RLW-02P113
0.33	1.8	RLW-02P101	RLW-02P111	RLW-03P403	RLW-03P413
0.5	2.4	RLW-03P401	RLW-03P411	RLW-03P403	RLW-03P413
0.75	3.5	RLW-04P801	RLW-04P811	RLW-04P803	RLW-04P813
1	4.6	RLW-04P801	RLW-04P811	RLW-07P603	RLW-07P613
1.5	6.6	RLW-07P601	RLW-07P611	RLW-001103	RLW-001113
2	7.5	RLW-07P601	RLW-07P611	RLW-001103	RLW-001113
3	10.6	RLW-001101	RLW-001111	RLW-001403	RLW-001413
4	13.7	RLW-001401	RLW-001411	RLW-002103	RLW-002113
5	16.7	RLW-002101	RLW-002111	RLW-002803	RLW-002813
5.5	18.1	RLW-002101	RLW-002111	RLW-002803	RLW-002813
7.5	24.2	RLW-002801	RLW-002811	RLW-003503	RLW-003513
10	30.8	RLW-003501	RLW-003511	RLW-002801	RLW-002811
12.5	38.5	RLW-004601	RLW-004611	RLW-003501	RLW-003511
15	46.2	RLW-005501	RLW-005511	RLW-004601	RLW-004611
20	59.4	RLW-008301	RLW-008311	RLW-008303	RLW-008313
25	74.8	RLW-010401	RLW-010411	RLW-010403	RLW-010413
30	88.0	RLW-010401	RLW-010411	RLW-008301	RLW-008311
40	114.0	RLW-013001	RLW-013011	RLW-010401	RLW-010411
50	143.0	RLW-016001	RLW-016011	RLW-013001	RLW-013011
60	169.0	RLW-020001	RLW-020011	RLW-025003	RLW-025013
75	211.0	RLW-025001	RLW-025011	RLW-020001	RLW-020011
100	273.0	RLW-041401	RLW-041411	RLW-032201	RLW-032211
125	343.0	RLW-041401	RLW-041411	RLW-032201	RLW-032211
150	396.0	RLW-051501	RLW-051511	RLW-041401	RLW-041411
175	480.0	RLW-060001	RLW-060011	RLW-060003	RLW-060013
200	528.0	RLW-060001	RLW-060011	RLW-051501	RLW-051511
225	620.0	RLW-075001	RLW-075011	RLW-060001	RLW-060011
250	687.5	RLW-075001	RLW-075011	RLW-075001	RLW-075011

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Input Selection Guide by HP and 240 Volts

HP @ 240 V 60Hz	FLA	3% Impedance		5% Impedance	
		Open	NEMA 1	Open	NEMA 1
0.33	1.7	RLW-01P601	RLW-01P611	RLW-02P103	RLW-02P113
0.5	2.2	RLW-02P101	RLW-02P111	RLW-03P403	RLW-03P413
0.75	3.2	RLW-03P401	RLW-03P411	RLW-04P803	RLW-04P813
1	4.2	RLW-04P801	RLW-04P811	RLW-04P803	RLW-04P813
1.5	6.0	RLW-001103	RLW-001113	RLW-07P603	RLW-07P613
2	6.8	RLW-07P601	RLW-07P611	RLW-07P603	RLW-07P613
3	9.6	RLW-001101	RLW-001111	RLW-001103	RLW-001113
4	12.5	RLW-001401	RLW-001411	RLW-001403	RLW-001413
5	15.2	RLW-002803	RLW-002813	RLW-002103	RLW-002113
5.5	16.4	RLW-002101	RLW-002111	RLW-002103	RLW-002113
7.5	22.0	RLW-002101	RLW-002111	RLW-002803	RLW-002813
10	28.0	RLW-002801	RLW-002811	RLW-003503	RLW-003513
12.5	35.0	RLW-004601	RLW-004611	RLW-004603	RLW-004613
15	42.0	RLW-005501	RLW-005511	RLW-005503	RLW-005513
20	54.0	RLW-006501	RLW-006511	RLW-006503	RLW-006513
25	68.0	RLW-008301	RLW-008311	RLW-008303	RLW-008313
30	80.0	RLW-010401	RLW-010411	RLW-010403	RLW-010413
40	104.0	RLW-013001	RLW-013011	RLW-013003	RLW-013013
50	130.0	RLW-016001	RLW-016011	RLW-016003	RLW-016013
60	154.0	RLW-016001	RLW-016011	RLW-020003	RLW-020013
75	192.0	RLW-020001	RLW-020011	RLW-025003	RLW-025013
100	248.0	RLW-025001	RLW-025011	RLW-032203	RLW-032213
125	312.0	RLW-041401	RLW-041411	RLW-041403	RLW-041413
150	360.0	RLW-041401	RLW-041411	RLW-051503	RLW-051513
175	420.0	RLW-051501	RLW-051511	RLW-051503	RLW-051513
200	480.0	RLW-051501	RLW-051511	RLW-060003	RLW-060013
225	540.0	RLW-060001	RLW-060011	RLW-060003	RLW-060013
250	600.0	RLW-075001	RLW-075011	RLW-075003	RLW-075013
275	660.0	RLW-075001	RLW-075011	RLW-075003	RLW-075013
300	720.0	RLW-075001	RLW-075011	RLW-075001	RLW-075011

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Input Selection Guide by KW and 400 Volts

KW @ 400V 50Hz	FLA	3% Impedance		5% Impedance	
		Open	NEMA 1	Open	NEMA 1
0.25	0.6	RLW-01P106	RLW-01P116	RLW-0P7506	RLW-0P7516
0.33	0.7	RLW-01P105	RLW-01P115	RLW-0P7505	RLW-0P7515
0.5	1.2	RLW-01P103	RLW-01P113	RLW-01P105	RLW-01P115
0.75	1.7	RLW-03P406	RLW-03P416	RLW-02P106	RLW-02P116
1	2.2	RLW-02P103	RLW-02P113	RLW-02P105	RLW-02P115
1.5	3.2	RLW-03P403	RLW-03P413	RLW-03P405	RLW-03P415
2	3.8	RLW-03P403	RLW-03P413	RLW-04P806	RLW-04P816
3	4.9	RLW-04P803	RLW-04P813	RLW-04P805	RLW-04P815
4	6.6	RLW-07P603	RLW-07P613	RLW-07P606	RLW-07P616
5	8.1	RLW-07P603	RLW-07P613	RLW-07P605	RLW-07P615
5.5	8.4	RLW-001103	RLW-001113	RLW-001106	RLW-001116
7.5	11.1	RLW-001103	RLW-001113	RLW-001105	RLW-001115
10	15.0	RLW-001403	RLW-001413	RLW-001405	RLW-001415
12.5	18.1	RLW-002103	RLW-002113	RLW-002106	RLW-002116
15	21.8	RLW-002103	RLW-002113	RLW-002105	RLW-002115
20	29.1	RLW-003503	RLW-003513	RLW-002805	RLW-002815
25	34.9	RLW-003503	RLW-003513	RLW-003505	RLW-003515
30	41.7	RLW-004603	RLW-004613	RLW-004605	RLW-004615
40	56.3	RLW-006503	RLW-006513	RLW-005505	RLW-005515
50	69.8	RLW-008303	RLW-008313	RLW-006505	RLW-006515
60	82.5	RLW-008303	RLW-008313	RLW-008305	RLW-008315
75	100.9	RLW-010403	RLW-010413	RLW-010405	RLW-010415
100	137.7	RLW-016003	RLW-016013	RLW-013005	RLW-013015
125	163.9	RLW-016003	RLW-016013	RLW-016005	RLW-016015
150	197.9	RLW-020003	RLW-020013	RLW-020005	RLW-020015
175	233.0	RLW-025003	RLW-025013	RLW-025005	RLW-025015
200	269.7	RLW-032203	RLW-032213	RLW-025005	RLW-025015
225	285.0	RLW-032203	RLW-032213	RLW-032205	RLW-032215
250	322.0	RLW-032203	RLW-032213	RLW-032205	RLW-032215
275	352.0	RLW-041403	RLW-041413	RLW-032205	RLW-032215
300	376.4	RLW-041403	RLW-041413	RLW-041405	RLW-041415
350	449.1	RLW-051503	RLW-051513	RLW-041403	RLW-041413
400	510.2	RLW-060003	RLW-060013	RLW-051505	RLW-051515
425	582.0	RLW-060003	RLW-060013	RLW-060005	RLW-060015
450	594.9	RLW-075003	RLW-075013	RLW-060005	RLW-060015
475	605.0	RLW-075003	RLW-075013	RLW-060005	RLW-060015
500	660.8	RLW-075003	RLW-075013	RLW-075005	RLW-075015
550	728.0	RLW-075003	RLW-075013	RLW-075005	RLW-075015

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Input Selection Guide by HP and 480 Volts

HP @ 480V 60Hz	FLA	3% Impedance		5% Impedance	
		Open	NEMA 1	Open	NEMA 1
0.25	0.7	RLW-01P105	RLW-01P115	RLW-0P7506	RLW-0P7516
0.33	0.8	RLW-01P606	RLW-01P616	RLW-01P106	RLW-01P116
0.5	1.1	RLW-01P103	RLW-01P113	RLW-01P105	RLW-01P115
0.75	1.6	RLW-01P603	RLW-01P613	RLW-01P605	RLW-01P615
1	2.1	RLW-02P103	RLW-02P113	RLW-02P105	RLW-02P115
1.5	3.0	RLW-04P805	RLW-04P815	RLW-03P405	RLW-03P415
2	3.4	RLW-03P403	RLW-03P413	RLW-03P405	RLW-03P415
3	4.8	RLW-04P803	RLW-04P813	RLW-04P805	RLW-04P815
4	6.2	RLW-07P603	RLW-07P613	RLW-07P606	RLW-07P616
5	7.6	RLW-07P603	RLW-07P613	RLW-07P605	RLW-07P615
5.5	8.2	RLW-07P603	RLW-07P613	RLW-07P605	RLW-07P615
7.5	11.0	RLW-001103	RLW-001113	RLW-001105	RLW-001115
10	14.0	RLW-001403	RLW-001413	RLW-001405	RLW-001415
12.5	17.5	RLW-002103	RLW-002113	RLW-002106	RLW-002116
15	21.0	RLW-002103	RLW-002113	RLW-002105	RLW-002115
20	27.0	RLW-002803	RLW-002813	RLW-002805	RLW-002815
25	34.0	RLW-003503	RLW-003513	RLW-003505	RLW-003515
30	40.0	RLW-004603	RLW-004613	RLW-004605	RLW-004615
40	52.0	RLW-006503	RLW-006513	RLW-005505	RLW-005515
50	65.0	RLW-006503	RLW-006513	RLW-006505	RLW-006515
60	77.0	RLW-008303	RLW-008313	RLW-008305	RLW-008315
75	96.0	RLW-010403	RLW-010413	RLW-010405	RLW-010415
100	124.0	RLW-013003	RLW-013013	RLW-013005	RLW-013015
125	156.0	RLW-016003	RLW-016013	RLW-016005	RLW-016015
150	180.0	RLW-020003	RLW-020013	RLW-020005	RLW-020015
175	210.0	RLW-025003	RLW-025013	RLW-020005	RLW-020015
200	240.0	RLW-025003	RLW-025013	RLW-025005	RLW-025015
225	270.9	RLW-032203	RLW-032213	RLW-025005	RLW-025015
250	302.0	RLW-032203	RLW-032213	RLW-032205	RLW-032215
275	331.6	RLW-041403	RLW-041413	RLW-032205	RLW-032215
300	361.0	RLW-041403	RLW-041413	RLW-041405	RLW-041415
350	414.0	RLW-051503	RLW-051513	RLW-041405	RLW-041415
400	477.0	RLW-051503	RLW-051513	RLW-051505	RLW-051515
425	496.6	RLW-060003	RLW-060013	RLW-051505	RLW-051515
450	515.0	RLW-060003	RLW-060013	RLW-051505	RLW-051515
475	552.1	RLW-060003	RLW-060013	RLW-060005	RLW-060015
500	590.0	RLW-075003	RLW-075013	RLW-060005	RLW-060015
550	649.0	RLW-075003	RLW-075013	RLW-060005	RLW-060015
600	708.0	RLW-075003	RLW-075013	RLW-075005	RLW-075015

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Input Selection Guide by HP and 600 Volts

HP @ 600V 60Hz	FLA	3% Impedance		5% Impedance	
		Open	NEMA 1	Open	NEMA 1
0.25	0.5	RLW-0P7506	RLW-0P7516	RLW-00P506	RLW-00P516
0.33	0.7	RLW-01P106	RLW-01P116	RLW-0P7506	RLW-0P7516
0.5	0.9	RLW-01P606	RLW-01P616	RLW-01P106	RLW-01P116
0.75	1.3	RLW-02P106	RLW-02P116	RLW-01P606	RLW-01P616
1	1.7	RLW-02P105	RLW-02P115	RLW-02P106	RLW-02P116
1.5	2.4	RLW-03P405	RLW-03P415	RLW-03P406	RLW-03P416
2	2.7	RLW-04P806	RLW-04P816	RLW-03P406	RLW-03P416
3	3.9	RLW-04P805	RLW-04P815	RLW-04P806	RLW-04P816
4	4.9	RLW-07P606	RLW-07P616	RLW-04P806	RLW-04P816
5	6.1	RLW-07P605	RLW-07P615	RLW-07P606	RLW-07P616
5.5	6.6	RLW-07P605	RLW-07P615	RLW-07P606	RLW-07P616
7.5	9.0	RLW-001105	RLW-001115	RLW-001106	RLW-001116
10	11.0	RLW-001103	RLW-001113	RLW-001106	RLW-001116
12.5	14.0	RLW-001403	RLW-001413	RLW-001406	RLW-001416
15	17.0	RLW-002105	RLW-002115	RLW-002106	RLW-002116
20	22.0	RLW-002805	RLW-002815	RLW-002806	RLW-002816
25	27.0	RLW-002803	RLW-002813	RLW-002806	RLW-002816
30	32.0	RLW-003503	RLW-003513	RLW-003505	RLW-003515
40	41.0	RLW-004603	RLW-004613	RLW-004605	RLW-004615
50	52.0	RLW-005503	RLW-005513	RLW-005505	RLW-005515
60	62.0	RLW-006503	RLW-006513	RLW-006505	RLW-006515
75	77.0	RLW-008303	RLW-008313	RLW-008305	RLW-008315
100	99.0	RLW-010403	RLW-010413	RLW-010405	RLW-010415
125	125.0	RLW-013003	RLW-013013	RLW-013005	RLW-013015
150	144.0	RLW-016003	RLW-016013	RLW-016005	RLW-016015
175	168.0	RLW-016003	RLW-016013	RLW-016005	RLW-016015
200	192.0	RLW-020003	RLW-020013	RLW-020005	RLW-020015
225	216.9	RLW-020003	RLW-020013	RLW-020005	RLW-020015
250	242.0	RLW-025003	RLW-025013	RLW-025005	RLW-025015
275	265.6	RLW-025003	RLW-025013	RLW-025005	RLW-025015
300	289.0	RLW-032203	RLW-032213	RLW-032205	RLW-032215
350	336.0	RLW-032203	RLW-032213	RLW-032205	RLW-032215
400	382.0	RLW-041403	RLW-041413	RLW-041405	RLW-041415
425	397.5	RLW-041403	RLW-041413	RLW-041405	RLW-041415
450	412.0	RLW-041403	RLW-041413	RLW-041405	RLW-041415
475	441.6	RLW-041403	RLW-041413	RLW-041405	RLW-041415
500	472.0	RLW-051503	RLW-051513	RLW-051505	RLW-051515
550	523.6	RLW-051503	RLW-051513	RLW-051505	RLW-051515
600	576.0	RLW-060003	RLW-060013	RLW-060005	RLW-060015
650	624.0	RLW-060003	RLW-060013	RLW-060005	RLW-060015
700	672.0	RLW-075003	RLW-075013	RLW-075005	RLW-075015
750	720.00	RLW-075003	RLW-075013	RLW-075005	RLW-075015

RLW Reactors

Technical Reference Manual

Input Selection Guide by KW and 690 Volts

KW @ 690V 50Hz	FLA	3% Impedance		4% Impedance	
		Open	NEMA 1	Open	NEMA 1
3	2.8	RLW-03P406	RLW-03P416	RLW-03P406	RLW-03P416
4	3.9	RLW-04P806	RLW-04P816	RLW-04P806	RLW-04P816
5	4.8	RLW-04P805	RLW-04P815	RLW-04P806	RLW-04P816
5.5	5.0	RLW-04P805	RLW-04P815	RLW-04P806	RLW-04P816
7.5	6.6	RLW-07P606	RLW-07P616	RLW-07P606	RLW-07P616
10	8.8	RLW-001106	RLW-001116	RLW-001106	RLW-001116
12.5	10.5	RLW-001105	RLW-001115	RLW-001106	RLW-001116
15	12.4	RLW-001406	RLW-001416	RLW-001406	RLW-001416
20	16.6	RLW-002106	RLW-002116	RLW-002106	RLW-002116
25	20.5	RLW-002105	RLW-002115	RLW-002106	RLW-002116
30	24.0	RLW-002806	RLW-002816	RLW-002806	RLW-002816
40	32.0	RLW-003505	RLW-003515	RLW-003507	RLW-003517
50	39.0	RLW-004605	RLW-004615	RLW-004607	RLW-004617
60	47.0	RLW-005505	RLW-005515	RLW-005507	RLW-005517
75	56.0	RLW-005505	RLW-005515	RLW-005507	RLW-005517
100	76.0	RLW-008305	RLW-008315	RLW-008307	RLW-008317
125	92.0	RLW-008305	RLW-008315	RLW-008305	RLW-008315
150	110.0	RLW-010405	RLW-010415	RLW-010407	RLW-010417
175	130.0	RLW-013005	RLW-013015	RLW-013007	RLW-013017
200	151.2	RLW-016005	RLW-016015	RLW-016007	RLW-016017
225	165.0	RLW-016005	RLW-016015	RLW-016007	RLW-016017
250	187.0	RLW-020005	RLW-020015	RLW-020007	RLW-020017
275	198.0	RLW-020005	RLW-020015	RLW-020007	RLW-020017
300	235.0	RLW-025005	RLW-025015	RLW-025007	RLW-025017
350	253.0	RLW-025005	RLW-025015	RLW-025007	RLW-025017
400	285.0	RLW-032205	RLW-032215	RLW-032207	RLW-032217
425	321.0	RLW-032205	RLW-032215	RLW-032207	RLW-032217
450	340.0	RLW-032205	RLW-032215	RLW-032207	RLW-032217
475	355.0	RLW-041405	RLW-041415	RLW-041407	RLW-041417
500	385.0	RLW-041405	RLW-041415	RLW-041407	RLW-041417
550	390.0	RLW-041405	RLW-041415	RLW-041407	RLW-041417
600	432.0	RLW-041403	RLW-041413	RLW-041405	RLW-041415
650	480.0	RLW-051505	RLW-051515	RLW-051507	RLW-051517
700	505.1	RLW-051505	RLW-051515	RLW-051507	RLW-051517
750	540.0	RLW-051505	RLW-051515	RLW-051507	RLW-051517
800	600.0	RLW-060005	RLW-060015	RLW-060007	RLW-060017
850	630.0	RLW-060005	RLW-060015	RLW-060007	RLW-060017
875	667.3	RLW-075005	RLW-075015	RLW-075007	RLW-075017
900	690.0	RLW-075005	RLW-075015	RLW-075007	RLW-075017
950	710.0	RLW-075005	RLW-075015	RLW-075007	RLW-075017
1000	740.6	RLW-075005	RLW-075015	RLW-075007	RLW-075017

RLW Reactors

Technical Reference Manual

Input Selection Guide by HP/KW and Voltage

NEMA 3R

Input Selection Guide by HP and 208 Volts

HP @ 208 V 60Hz	FLA	3% Impedance	5% Impedance
		NEMA 3R	NEMA 3R
60	169.0	RLW-020031	RLW-025033
75	211.0	RLW-025031	RLW-020031
100	273.0	RLW-041431	RLW-032231
125	343.0	RLW-041431	RLW-032231
150	396.0	RLW-051531	RLW-041431
175	480.0	RLW-060031	RLW-060033
200	528.0	RLW-060031	RLW-051531
225	620.0	RLW-075031	RLW-060031
250	687.5	RLW-075031	RLW-075031

Input Selection Guide by HP and 240 Volts

HP @ 240 V 60Hz	FLA	3% Impedance	5% Impedance
		NEMA 3R	NEMA 3R
60	154.0		RLW-020033
75	192.0	RLW-020031	RLW-025033
100	248.0	RLW-025031	RLW-032233
125	312.0	RLW-041431	RLW-041433
150	360.0	RLW-041431	RLW-051533
175	420.0	RLW-051531	RLW-051533
200	480.0	RLW-051531	RLW-060033
225	540.0	RLW-060031	RLW-060033
250	600.0	RLW-075031	RLW-075033
275	660.0	RLW-075031	RLW-075033
300	720.0	RLW-075031	RLW-075031

RLW Reactors

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Input Selection Guide by KW and 400 Volts

KW @ 400V 50Hz	FLA	3% Impedance	5% Impedance
		NEMA 3R	NEMA 3R
150	197.9	RLW-020033	RLW-020035
175	233.0	RLW-025033	RLW-025035
200	269.7	RLW-032233	RLW-025035
225	285.0	RLW-032233	RLW-032235
250	322.0	RLW-032233	RLW-032235
275	352.0	RLW-041433	RLW-032235
300	376.4	RLW-041433	RLW-041435
350	449.1	RLW-051533	RLW-041433
400	510.2	RLW-060033	RLW-051535
425	582.0	RLW-060033	RLW-060035
450	594.9	RLW-075033	RLW-060035
475	605.0	RLW-075033	RLW-060035
500	660.8	RLW-075033	RLW-075035
550	728.0	RLW-075033	RLW-075035

Input Selection Guide by HP and 480 Volts

HP @ 480V 60Hz	FLA	3% Impedance	5% Impedance
		NEMA 3R	NEMA 3R
150	180.0	RLW-020033	RLW-020035
175	210.0	RLW-025033	RLW-020035
200	240.0	RLW-025033	RLW-025035
225	270.9	RLW-032233	RLW-025035
250	302.0	RLW-032233	RLW-032235
275	331.6	RLW-041433	RLW-032235
300	361.0	RLW-041433	RLW-041435
350	414.0	RLW-051533	RLW-041435
400	477.0	RLW-051533	RLW-051535
425	496.6	RLW-060033	RLW-051535
450	515.0	RLW-060033	RLW-051535
475	552.1	RLW-060033	RLW-060035
500	590.0	RLW-075033	RLW-060035
550	649.0	RLW-075033	RLW-060035
600	708.0	RLW-075033	RLW-075035

RLW Reactors

Technical Reference Manual

Input Selection Guide by HP and 600 Volts

HP @ 600V 60Hz	FLA	3% Impedance	5% Impedance
		NEMA 3R	NEMA 3R
200	192.0	RLW-020033	RLW-020035
225	216.9	RLW-020033	RLW-020035
250	242.0	RLW-025033	RLW-025035
275	265.6	RLW-025033	RLW-025035
300	289.0	RLW-032233	RLW-032235
350	336.0	RLW-032233	RLW-032235
400	382.0	RLW-041433	RLW-041435
425	397.5	RLW-041433	RLW-041435
450	412.0	RLW-041433	RLW-041435
475	441.6	RLW-041433	RLW-041435
500	472.0	RLW-051533	RLW-051535
550	523.6	RLW-051533	RLW-051535
600	576.0	RLW-060033	RLW-060035
650	624.0	RLW-060033	RLW-060035
700	672.0	RLW-075033	RLW-075035
750	720.0	RLW-075033	RLW-075035

Input Selection Guide by KW and 690 Volts

KW @ 690V 50Hz	FLA	3% Impedance	4% Impedance
		NEMA 3R	NEMA 3R
250	187.0	RLW-020035	RLW-020037
275	198.0	RLW-020035	RLW-020037
300	235.0	RLW-025035	RLW-025037
350	253.0	RLW-025035	RLW-025037
400	285.0	RLW-032235	RLW-032237
425	321.0	RLW-032235	RLW-032237
450	340.0	RLW-032235	RLW-032237
475	355.0	RLW-041435	RLW-041437
500	385.0	RLW-041435	RLW-041437
550	390.0	RLW-041435	RLW-041437
600	432.0	RLW-041433	RLW-041435
650	480.0	RLW-051535	RLW-051537
700	505.1	RLW-051535	RLW-051537
750	540.0	RLW-051535	RLW-051537
800	600.0	RLW-060035	RLW-060037
850	630.0	RLW-060035	RLW-060037
875	667.3	RLW-075035	RLW-075037
900	690.0	RLW-075035	RLW-075037
950	710.0	RLW-075035	RLW-075037
1000	740.6	RLW-075035	RLW-075037



RLW Reactors

Technical Reference Manual

Output selection guide by HP/KW and voltage

Open and NEMA 1

Output Selection Guide by HP – 208Volts and 240 Volts

HP @ 208 V 60Hz	FLA	100 Foot limit	
		Open	NEMA 1
0.25	1.4	RLW-02P103	RLW-02P113
0.33	1.8	RLW-04P806	RLW-04P816
0.5	2.4	RLW-07P606	RLW-07P616
0.75	3.5	RLW-07P605	RLW-07P615
1	4.6	RLW-001105	RLW-001115
1.5	6.6	RLW-001103	RLW-001113
2	7.5	RLW-001103	RLW-001113
3	10.6	RLW-001403	RLW-001413
5	16.7	RLW-002803	RLW-002813
7.5	24.2	RLW-003503	RLW-003513
10	30.8	RLW-004603	RLW-004613
15	46.2	RLW-010405	RLW-010415
20	59.4	RLW-008303	RLW-008313
25	74.8	RLW-010403	RLW-010413
30	88	RLW-013003	RLW-013013
40	114	RLW-016003	RLW-016013
50	143	RLW-020003	RLW-020013
60	169	RLW-025003	RLW-025013
75	211	RLW-032203	RLW-032213
100	273	RLW-041403	RLW-041413
125	343	RLW-051503	RLW-051513
150	396	RLW-060003	RLW-060013
200	528		
250	687.5		

HP @ 240 V 60Hz	FLA	100 foot limit	
		Open	NEMA 1
0.25	1.3	RLW-03P406	RLW-03P416
0.33	1.7	RLW-03P405	RLW-03P415
0.5	2.2	RLW-04P805	RLW-04P815
0.75	3.2	RLW-07P606	RLW-07P616
1	4.2	RLW-001106	RLW-001116
1.5	6	RLW-001105	RLW-001115
2	6.8	RLW-001105	RLW-001115
3	9.6	RLW-001403	RLW-001413
5	15.2	RLW-002805	RLW-002815
7.5	22	RLW-003503	RLW-003513
10	28	RLW-003503	RLW-003513
15	42	RLW-006503	RLW-006513
20	54	RLW-010405	RLW-010415
25	68	RLW-013005	RLW-013015
30	80	RLW-010403	RLW-010413
40	104	RLW-013003	RLW-013013
50	130	RLW-016003	RLW-016013
60	154	RLW-020003	RLW-020013
75	192	RLW-025003	RLW-025013
100	248	RLW-032203	RLW-032213
125	312	RLW-041403	RLW-041413
150	360	RLW-051503	RLW-051513
200	480	RLW-075003	RLW-075013
250	600		
300	720		

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Output Selection Guide by HP – 480 Volts and 600 Volts

HP @ 480V 60Hz	FLA	100 Foot Limit	
		Open	NEMA 1
0.25	0.7	RLW-01P106	RLW-01P116
0.33	0.8	RLW-01P606	RLW-01P616
0.5	1.1	RLW-01P606	RLW-01P616
0.75	1.6	RLW-02P106	RLW-02P116
1	2.1	RLW-03P406	RLW-03P416
1.5	3	RLW-04P806	RLW-04P816
2	3.4	RLW-04P806	RLW-04P816
3	4.8	RLW-07P606	RLW-07P616
5	7.6	RLW-001106	RLW-001116
7.5	11	RLW-001406	RLW-001416
10	14	RLW-002106	RLW-002116
15	21	RLW-002806	RLW-002816
20	27	RLW-003505	RLW-003515
25	34	RLW-004605	RLW-004615
30	40	RLW-006505	RLW-006515
40	52	RLW-008305	RLW-008315
50	65	RLW-008305	RLW-008315
60	77	RLW-010405	RLW-010415
75	96	RLW-013005	RLW-013015
100	124	RLW-016005	RLW-016015
125	156	RLW-020005	RLW-020015
150	180	RLW-025005	RLW-025015
200	240	RLW-032205	RLW-032215
250	302	RLW-041405	RLW-041415
300	361	RLW-051505	RLW-051515
350	414	RLW-051505	RLW-051515
400	477	RLW-075005	RLW-075015
450	515	RLW-075005	RLW-075015
500	590		
600	708		

HP @ 600V 60Hz	FLA	100 Foot Limit	
		Open	NEMA 1
0.25	0.5	RLW-0P7506	RLW-0P7516
0.33	0.7	RLW-01P106	RLW-01P116
0.5	0.9	RLW-01P606	RLW-01P616
0.75	1.3	RLW-02P106	RLW-02P116
1	1.7	RLW-03P406	RLW-03P416
1.5	2.4	RLW-04P806	RLW-04P816
2	2.7	RLW-04P806	RLW-04P816
3	3.9	RLW-07P606	RLW-07P616
5	6.1	RLW-001106	RLW-001116
7.5	9	RLW-001406	RLW-001416
10	11	RLW-002106	RLW-002116
15	17	RLW-002806	RLW-002816
20	22	RLW-003505	RLW-003515
25	27	RLW-003505	RLW-003515
30	32	RLW-004605	RLW-004615
40	41	RLW-006505	RLW-006515
50	52	RLW-008305	RLW-008315
60	62	RLW-008305	RLW-008315
75	77	RLW-010405	RLW-010415
100	99	RLW-013005	RLW-013015
125	125	RLW-016005	RLW-016015
150	144	RLW-020005	RLW-020015
200	192	RLW-025005	RLW-025015
250	242	RLW-032205	RLW-032215
300	289	RLW-041405	RLW-041415
350	336	RLW-051505	RLW-051515
400	382	RLW-051505	RLW-051515
450	412	RLW-051505	RLW-051515
500	472	RLW-075005	RLW-075015
600	576		
700	672		



RLW Reactors

Technical Reference Manual

Output Selection Guide by KW – 400 Volts and 690 Volts

KW @ 400V 50Hz	FLA	100 Foot Limit	
		Open	NEMA 1
0.18	0.6	RLW-01P106	RLW-01P116
0.25	0.7	RLW-01P106	RLW-01P116
0.37	1.2	RLW-02P106	RLW-02P116
0.55	1.6	RLW-02P106	RLW-02P116
0.75	1.9	RLW-03P406	RLW-03P416
1.1	2.5	RLW-04P806	RLW-04P816
1.5	3.4	RLW-04P806	RLW-04P816
2.2	4.9	RLW-001106	RLW-001116
3.7	8.2	RLW-001406	RLW-001416
5.5	11.2	RLW-002106	RLW-002116
7.5	15	RLW-002806	RLW-002816
11	21.8	RLW-003505	RLW-003515
15	29.1	RLW-004605	RLW-004615
18.5	34.9	RLW-004605	RLW-004615
22	41.7	RLW-006505	RLW-006515
30	56.3	RLW-008305	RLW-008315
37.5	69.8	RLW-010405	RLW-010415
45	82.5	RLW-010405	RLW-010415
55	100.9	RLW-013005	RLW-013015
75	137.7	RLW-020005	RLW-020015
93	163.9	RLW-025005	RLW-025015
112	197.9	RLW-025005	RLW-025015
150	269.7	RLW-041405	RLW-041415
187	322	RLW-041405	RLW-041415
225	376.4	RLW-051505	RLW-051515
262	449.1	RLW-075005	RLW-075015
300	582		
375	727.5		

KW @ 690V 50Hz	FLA	100 Foot Limit	
		Open	NEMA 1
2.2	2.8	RLW-04P806	RLW-04P816
3.7	3.7	RLW-07P606	RLW-07P616
5.5	4.8	RLW-07P606	RLW-07P616
7.5	6.6	RLW-001106	RLW-001116
11	8.8	RLW-001406	RLW-001416
15	12.4	RLW-002106	RLW-002116
18.5	16.6	RLW-002806	RLW-002816
22	20.5	RLW-002806	RLW-002816
30	24	RLW-003505	RLW-003515
37.5	32	RLW-004605	RLW-004615
45	39	RLW-006505	RLW-006515
55	47	RLW-008305	RLW-008315
75	56	RLW-008305	RLW-008315
93	76	RLW-010405	RLW-010415
112	92	RLW-013005	RLW-013015
150	110	RLW-016005	RLW-016015
187	130	RLW-016005	RLW-016015
225	158	RLW-020005	RLW-020015
262	198	RLW-025005	RLW-025015
300	235	RLW-032205	RLW-032215
375	285	RLW-041405	RLW-041415
450	340	RLW-051505	RLW-051515
550	385	RLW-051505	RLW-051515
600	432	RLW-075005	RLW-075015
675	480	RLW-075005	RLW-075015
750	540		

RLW Reactors

Technical Reference Manual

Output selection guide by HP/KW and Voltage

NEMA 3R

Output Selection Guide by HP – 208 Volts and 240 Volts

HP @ 208 V 60Hz	FLA	100 Foot limit
		NEMA 3R
50	143	RLW-020033
60	169	RLW-025033
75	211	RLW-032233
100	273	RLW-041433
125	343	RLW-051533
150	396	RLW-060033
200	528	

HP @ 240 V 60Hz	FLA	100 foot limit
		NEMA 3R
50	130	
60	154	RLW-020033
75	192	RLW-025033
100	248	RLW-032233
125	312	RLW-041433
150	360	RLW-051533
200	480	RLW-075033

Output Selection Guide by HP – 480 Volts and 600 Volts

HP @ 480V 60Hz	FLA	100 Foot Limit
		NEMA 3R
125	156	RLW-020035
150	180	RLW-025035
200	240	RLW-032235
250	302	RLW-041435
300	361	RLW-051535
350	414	RLW-051535
400	477	RLW-075035
450	515	RLW-075035
500	590	

HP @ 600V 60Hz	FLA	100 Foot Limit
		NEMA 3R
125	125	RLW-016035
150	144	RLW-020035
200	192	RLW-025035
250	242	RLW-032235
300	289	RLW-041435
350	336	RLW-051535
400	382	RLW-051535
450	412	RLW-051535
500	472	RLW-075035

Output Selection Guide by KW – 400 Volts and 690 Volts

KW @ 400V 50Hz	FLA	100 Foot Limit
		NEMA 3R
75	137.7	RLW-020035
93	163.9	RLW-025035
112	197.9	RLW-025035
150	269.7	RLW-041435
187	322	RLW-041435
225	376.4	RLW-051535
262	449.1	RLW-075035
300	582	
375	727.5	

KW @ 690V 50Hz	FLA	100 Foot Limit
		NEMA 3R
225	158	RLW-020035
262	198	RLW-025035
300	235	RLW-032235
375	285	RLW-041435
450	340	RLW-051535
550	385	RLW-051535
600	432	RLW-075035
675	480	RLW-075035
750	540	

RLW Reactors

Technical Reference Manual

Factory Configured Option Kits

KIT-0038

DIN rail Mount.

A DIN rail mounting option is provided to utilize standard 35mm panel mounted DIN rail for securing the reactor via two steel mounting clips. The DIN rail kit is only available on snap channel reactors up to 7 amps and indicated by figure 1- 2 on mechanical table.

To incorporate this option into a selected reactor add **KIT-0038** to each selected RLW reactor and add **\$28** DIN clip list price to the list price of the reactor. Clips and hardware are shipped loose.

KIT-0039

RL base mount converter plate.

The base plate adaptor option will allow the RLW to use existing RL bolt hole mounting patterns.

To incorporate this option into a selected reactor add **KIT-0039** to each selected RLW reactor and add **\$38** base mount list price to the list price of the reactor. Base plate hardware is shipped loose.

KIT-0040

Vibration pads for enclosure mounting.

Vibration isolation for enclosed reactors may be fitted with an optional vibration pad to dampen cabinet vibrations from the reactor.

To incorporate this option into a selected reactor add **KIT-0040** to each selected RLW reactor and add **\$51** vibration pads list price to the list price of the reactor. Vibration pads are shipped loose.

Note: The above listed options may affect product lead times consult the factory for scheduled delivery for these options.

RLW Reactors

Technical Reference Manual

Mechanical Data

Open Panel

RMS Amps	Open Part Number			Dimension in inches					
	Open PN	Wt	Fig	A width	B Height	C Depth	D	E	F
0.5	RLW-00P501	1.5	1-2	4.5	3.7	1.5	0.0	4	-
	RLW-00P503	1.5	1-2	4.5	3.7	1.5	0.0	4	-
	RLW-00P505	1.6	1-2	4.5	3.7	1.5	0.0	4	-
	RLW-00P506	1.6	1-2	4.5	3.7	1.5	0.0	4	-
0.75	RLW-0P7501	1.4	1-2	4.5	3.7	1.5	0.0	4	-
	RLW-0P7503	1.5	1-2	4.5	3.7	1.5	0.0	4	-
	RLW-0P7505	1.5	1-2	4.5	3.7	1.5	0.0	4	-
	RLW-0P7506	1.6	1-2	4.5	3.7	1.5	0.0	4	-
1.1	RLW-01P101	1.5	1-2	4.5	3.7	1.5	0.0	4	-
	RLW-01P103	1.6	1-2	4.5	3.7	1.5	0.0	4	-
	RLW-01P105	1.6	1-2	4.5	3.7	1.5	0.0	4	-
	RLW-01P106	1.7	1-2	4.5	3.7	1.5	0.0	4	-
1.6	RLW-01P601	1.5	1-2	4.5	3.7	1.5	0.0	4	-
	RLW-01P603	1.6	1-2	4.5	3.7	1.5	0.0	4	-
	RLW-01P605	1.6	1-2	4.5	3.7	1.5	0.0	4	-
	RLW-01P606	1.7	1-2	4.5	3.7	1.5	0.0	4	-
2.1	RLW-02P101	1.5	1-2	4.5	3.7	1.5	0.0	4	-
	RLW-02P103	1.6	1-2	4.5	3.7	1.5	0.0	4	-
	RLW-02P105	1.7	1-2	4.5	3.7	1.5	0.0	4	-
	RLW-02P106	1.7	1-2	4.5	3.7	1.5	0.0	4	-
3.4	RLW-03P401	1.6	1-2	4.5	3.7	1.5	0.0	4	-
	RLW-03P403	1.6	1-2	4.5	3.7	1.5	0.0	4	-
	RLW-03P405	2.7	3	4.4	5	2.8	2.0	1.4	-
	RLW-03P406	2.8	3	4.4	5	2.8	2.0	1.4	-
4.8	RLW-04P801	1.7	1-2	4.5	3.7	1.5	0.0	4	-
	RLW-04P803	1.8	1-2	4.5	3.7	1.5	0.0	4	-
	RLW-04P805	2.8	3	4.4	5	2.8	2.0	1.4	-
	RLW-04P806	4	3	4.4	5	3.1	2.1	1.4	-
7.6	RLW-07P601	1.8	1-2	4.5	3.7	1.5	0.0	4	-
	RLW-07P603	2.8	3	4.4	5	2.8	2.0	1.4	-
	RLW-07P605	4.1	3	4.4	5	3.1	2.1	1.4	-
	RLW-07P606	4.2	3	4.4	5	3.1	2.1	1.4	-
11	RLW-001101	2.7	3	4.4	5	2.8	2.0	1.4	-
	RLW-001103	4.2	3	4.4	5	3.1	2.1	1.4	-
	RLW-001105	5.3	3	4.4	5	3.5	2.6	1.4	-
	RLW-001106	7.1	3	6	5.8	2.9	2.1	2	-
14	RLW-001401	2.8	3	4.4	5.3	2.8	2.0	1.4	-
	RLW-001403	4.3	3	4.4	5	3.1	2.1	1.4	-
	RLW-001405	7.1	3	6	5.8	2.9	2.1	2	-
	RLW-001406	9.4	3	6	5.8	3.3	2.5	2	-

Note: DIN rail kit only available for figure 1-2 units only.
 Dimensional details contained here depict overall reactor sizes. See mtecorp.com for complete mechanical details and CAD drawing download.

RLW Reactors

Technical Reference Manual

Open Panel, Cont.

RMS Amps	Open Part Number			Dimension in inches					
	Open PN	Wt	Fig	A width	B Height	C Depth	D	E	F
21	RLW-002101	4.2	3	4.4	5.3	3.3	2.4	1.4	-
	RLW-002103	7.2	3	6	6.1	2.9	2.1	2	-
	RLW-002105	10	3	6	6.1	3.3	2.5	2	-
	RLW-002106	13.3	3	7.2	7	3.8	2.3	3	-
28	RLW-002801	5.1	3	4.4	5.3	3.5	2.6	1.4	-
	RLW-002803	9.5	3	6	6.1	3.3	2.5	2	-
	RLW-002805	10.4	3	6	6.1	3.3	2.3	2	-
	RLW-002806	14.3	3	7.2	7	3.8	2.3	3	-
35	RLW-003501	10	3	6	6	3.5	2.73	2	3
	RLW-003503	13	3	7.2	6	3.75	2.25	3	-
	RLW-003505	18	3	7.2	6	4.3	2.75	3	-
	RLW-003507	16	3	9	8.3	4.6	3.24	3	4.26
46	RLW-004601	13	3	7.2	6	3.75	2.25	3	-
	RLW-004603	17	3	7.2	6	4.3	2.75	3	-
	RLW-004605	24	3	9	8.3	4.8	3.24	3	4.26
	RLW-004607	29	3	9	8.3	5.1	3.5	3	4.26
55	RLW-005501	18	3	7.2	6	4	2.75	3	-
	RLW-005503	20	3	7.2	6	4.25	2.75	3	-
	RLW-005505	26	3	9	7	6.5	3.24	3	4.26
	RLW-005507	35	3	9	7	7.25	3.86	3	4.26
65	RLW-006501	18	3	7.2	6	4	4.25	3	-
	RLW-006503	22	3	7.2	6	4.25	2.75	3	-
	RLW-006505	26	3	9	7	6.5	3.24	3	4.26
	RLW-006507	44	3	9	7	7.25	4.24	3	4.26
83	RLW-008301	19	3	7.2	6	4.25	2.75	3	-
	RLW-008303	26	3	9	7	6.5	3.24	3	4.26
	RLW-008305	35	3	9	7	6.75	3.74	3	4.26
	RLW-008307	54	3	9	7	7.75	4.74	3	4.26
104	RLW-010401	22	3	7.2	6	6.5	2.75	3	4.26
	RLW-010403	28	3	9	7	7	3.24	3	4.26
	RLW-010405	41	3	9	7	7.25	4.24	3	4.26
	RLW-010407	57	3	9	7	7.75	4.76	3	4.26
130	RLW-013001	26	3	9.25	7.5	6.75	3.25	3	4.26
	RLW-013003	37	3	9.25	7.5	6.75	3.75	3	4.26
	RLW-013005	52	3	9.25	7.5	8.25	4.75	3	4.26
	RLW-013007	80	3	10.8	8.75	9	5.52	3.63	5.58
160	RLW-016001	34	3	9.25	7.5	6.75	3.75	3	4.26
	RLW-016003	49	3	9.25	7.5	8.25	4.75	3	4.26
	RLW-016005	53	3	9.25	7.5	8.25	4.75	3	4.26
	RLW-016007	75	3	10.8	8.5	8.5	6.37	3.63	5.58

Dimensional details contained here depict overall reactor sizes. See mtecorp.com for complete mechanical details and CAD drawing download.

RLW Reactors

Technical Reference Manual

Open Panel, Cont.

RMS Amps	Open Part Number			Dimension in inches					
	Open PN	Wt	Fig	A width	B Height	C Depth	D	E	F
200	RLW-020001	34	3	9.25	7.5	7	0.375	3	4.26
	RLW-020003	49	3	9.25	7.5	8.25	4.75	3	4.26
	RLW-020005	75	3	10.8	8.25	9	5.87	3.63	5.58
	RLW-020007	91	3	10.8	8.75	10	7.12	3.63	5.58
250	RLW-025001	35	3	9.25	7.5	7.5	3.75	3	4.26
	RLW-025003	55	3	9.25	7.5	8.5	4.75	3	4.26
	RLW-025005	75	3	10.8	8.75	9	5.87	3.63	5.58
	RLW-025007	121	3	10.8	8.5	11.75	8.02	3.63	5.58
322	RLW-032201	57	3	9.25	7.5	9	4.75	3	4.26
	RLW-032203	76	3	10.8	8.75	8.5	5.37	3.63	5.58
	RLW-032205	108	3	9	8.75	11	7.37	3.63	5.58
	RLW-032207	172	3	14.4	11.5	12.5	8.08	4.6	7.2
414	RLW-041401	78	3	9	8.75	9.5	5.37	3.63	5.58
	RLW-041403	98	3	9	8.75	11.5	6.87	3.63	5.58
	RLW-041405	125	3	9	8.75	12.5	7.37	3.63	5.58
	RLW-041407	197	3	14.4	11.5	13.5	9.62	4.6	7.2
515	RLW-051501	81	3	9	8.75	9.5	5.37	3.63	5.58
	RLW-051503	118	3	9	8.75	12	6.37	3.63	5.58
	RLW-051505	193	3	14.4	11.5	13.5	9.62	4.6	5.9
	RLW-051507	248	3	14.4	11.5	13.75	8.71	4.6	7.2
600	RLW-060001	86	3	9	8.75	10.5	5.37	3.63	5.58
	RLW-060003	144	3	14.4	11.5	12.5	8.12	4.6	5.9
	RLW-060005	204	3	14.4	11.5	13.75	8.62	3.63	5.58
	RLW-060007	292	3	14.4	11.5	15.5	10.21	4.6	7.2
750	RLW-075001	105	3	9	8.75	11.5	6.87	3.63	5.58
	RLW-075003	179	3	14.4	11.5	12.5	7.62	4.6	7.2
	RLW-075005	245	3	14.4	11.5	15	8.62	4.6	7.2
	RLW-075007	348	3	14.4	11.5	22	11.62	4.6	7.2

Dimensional details contained here depict overall reactor sizes. See mtecorp.com for complete mechanical details and CAD drawing download.

RLW Reactors

Technical Reference Manual

Mechanical Data, Cont.

Enclosed Reactor

RMS Amps	Part Number	NEMA 1	
		Weight/LBS.	Figure
0.5	RLW-00P511	8.5	4
	RLW-00P513	8.5	4
	RLW-00P515	8.6	4
	RLW-00P516	8.6	4
0.75	RLW-0P7511	8.4	4
	RLW-0P7513	8.5	4
	RLW-0P7515	8.5	4
	RLW-0P7516	8.6	4
1.1	RLW-01P111	8.5	4
	RLW-01P113	8.6	4
	RLW-01P115	8.6	4
	RLW-01P116	8.7	4
1.6	RLW-01P611	8.5	4
	RLW-01P613	8.6	4
	RLW-01P615	8.6	4
	RLW-01P616	8.7	4
2.1	RLW-02P111	8.5	4
	RLW-02P113	8.6	4
	RLW-02P115	8.7	4
	RLW-02P116	8.7	4
3.4	RLW-03P411	8.6	4
	RLW-03P413	8.6	4
	RLW-03P415	9.7	4
	RLW-03P416	9.8	4
4.8	RLW-04P811	8.7	4
	RLW-04P813	8.8	4
	RLW-04P815	9.8	4
	RLW-04P816	11.0	4
7.6	RLW-07P611	8.8	4
	RLW-07P613	9.8	4
	RLW-07P615	11.1	4
	RLW-07P616	11.2	4
11	RLW-001111	9.7	4
	RLW-001113	11.2	4
	RLW-001115	12.3	4
	RLW-001116	14.1	4
14	RLW-001411	9.8	4
	RLW-001413	11.3	4
	RLW-001415	14.1	4
	RLW-001416	27.4	5

RLW Reactors

Technical Reference Manual

Enclosed Reactor, Cont.

RMS Amps	Part Number	NEMA 1	
		Weight/LBS.	Figure
21	RLW-002111	22.2	5
	RLW-002113	25.2	5
	RLW-002115	28.0	5
	RLW-002116	31.3	5
28	RLW-002811	23.1	5
	RLW-002813	27.5	5
	RLW-002815	28.4	5
	RLW-002816	32.3	5
35	RLW-003511	28.0	5
	RLW-003513	31.0	5
	RLW-003515	36.0	5
	RLW-003517	34.0	5
46	RLW-004611	31.0	5
	RLW-004613	35.0	5
	RLW-004615	42.0	5
	RLW-004617	47.0	5
55	RLW-005511	36.0	5
	RLW-005513	38.0	5
	RLW-005515	44.0	5
	RLW-005517	53.0	5
65	RLW-006511	36.0	5
	RLW-006513	40.0	5
	RLW-006515	44.0	5
	RLW-006517	62.0	5
83	RLW-008311	37.0	5
	RLW-008313	44.0	5
	RLW-008315	53.0	5
	RLW-008317	72.0	5
104	RLW-010411	40.0	5
	RLW-010413	46.0	5
	RLW-010415	59.0	5
	RLW-010417	75.0	5
130	RLW-013011	44.0	5
	RLW-013013	55.0	5
	RLW-013015	70.0	5
	RLW-013017	98.0	5
160	RLW-016011	52.0	5
	RLW-016013	67.0	5
	RLW-016015	80.0	6
	RLW-016017	102.0	6

RLW Reactors

Technical Reference Manual

Enclosed Reactor, Cont.

RMS		NEMA 1			NEMA 3R	
Amps	Part Number	Weight/LBS.	Figure	Part Number	Weight/LBS.	Figure
200	RLW-020011	61	<u>6</u>	RLW-020031	118	<u>7</u>
	RLW-020013	76	<u>6</u>	RLW-020033	133	<u>7</u>
	RLW-020015	102	<u>6</u>	RLW-020035	159	<u>7</u>
	RLW-020017	118	<u>6</u>	RLW-020037	175	<u>7</u>
250	RLW-025011	62	<u>6</u>	RLW-025031	119	<u>7</u>
	RLW-025013	82	<u>6</u>	RLW-025033	139	<u>7</u>
	RLW-025015	102	<u>6</u>	RLW-025035	159	<u>7</u>
	RLW-025017	148	<u>6</u>	RLW-025037	205	<u>7</u>
322	RLW-032211	84	<u>6</u>	RLW-032231	141	<u>7</u>
	RLW-032213	220	<u>8</u>	RLW-032233	241	<u>8</u>
	RLW-032215	252	<u>8</u>	RLW-032235	273	<u>8</u>
	RLW-032217	316	<u>8</u>	RLW-032237	337	<u>8</u>
414	RLW-041411	222	<u>8</u>	RLW-041431	243	<u>8</u>
	RLW-041413	242	<u>8</u>	RLW-041433	263	<u>8</u>
	RLW-041415	269	<u>8</u>	RLW-041435	290	<u>8</u>
	RLW-041417	341	<u>8</u>	RLW-041437	362	<u>8</u>
515	RLW-051511	225	<u>8</u>	RLW-051531	246	<u>8</u>
	RLW-051513	262	<u>8</u>	RLW-051533	283	<u>8</u>
	RLW-051515	337	<u>8</u>	RLW-051535	358	<u>8</u>
	RLW-051517	392	<u>8</u>	RLW-051537	413	<u>8</u>
600	RLW-060011	230	<u>8</u>	RLW-060031	251	<u>8</u>
	RLW-060013	288	<u>8</u>	RLW-060033	309	<u>8</u>
	RLW-060015	348	<u>8</u>	RLW-060035	369	<u>8</u>
	RLW-060017	436	<u>8</u>	RLW-060037	457	<u>8</u>
750	RLW-075011	249	<u>8</u>	RLW-075031	270	<u>8</u>
	RLW-075013	323	<u>8</u>	RLW-075033	344	<u>8</u>
	RLW-075015	389	<u>8</u>	RLW-075035	410	<u>8</u>
	RLW-075017	492	<u>8</u>	RLW-075037	513	<u>8</u>

RLW Reactors

Technical Reference Manual

Reactor Electrical Data

RMS Amps	Open PN	NEMA 1	Inductance mH	Watts Loss
0.5	RLW-00P501	RLW-00P511	22	2.3
	RLW-00P503	RLW-00P513	46	3.6
	RLW-00P505	RLW-00P515	74	4.8
	RLW-00P506	RLW-00P516	92	5.4
0.75	RLW-0P7501	RLW-0P7511	15	4.2
	RLW-0P7503	RLW-0P7513	31	6.6
	RLW-0P7505	RLW-0P7515	49	8.8
	RLW-0P7506	RLW-0P7516	61	10.1
1.1	RLW-01P101	RLW-01P111	10	4.8
	RLW-01P103	RLW-01P113	21	7.8
	RLW-01P105	RLW-01P115	33	10.1
	RLW-01P106	RLW-01P116	42	11.9
1.6	RLW-01P601	RLW-01P611	6.9	6.9
	RLW-01P603	RLW-01P613	14	10.9
	RLW-01P605	RLW-01P615	23	15
	RLW-01P606	RLW-01P616	29	17.7
2.1	RLW-02P101	RLW-02P111	5.3	9
	RLW-02P103	RLW-02P113	11	14.3
	RLW-02P105	RLW-02P115	18	19.6
	RLW-02P106	RLW-02P116	22	22.3
3.4	RLW-03P401	RLW-03P411	3.2	12.3
	RLW-03P403	RLW-03P413	6.8	19.6
	RLW-03P405	RLW-03P415	11	26.5
	RLW-03P406	RLW-03P416	14	31.5
4.8	RLW-04P801	RLW-04P811	2.3	13.8
	RLW-04P803	RLW-04P813	4.8	23
	RLW-04P805	RLW-04P815	7.7	37.5
	RLW-04P806	RLW-04P816	10	40.1
7.6	RLW-07P601	RLW-07P611	1.5	19.2
	RLW-07P603	RLW-07P613	3	37.2
	RLW-07P605	RLW-07P615	4.8	47.8
	RLW-07P606	RLW-07P616	6	53.8
11	RLW-001101	RLW-001111	1	26.8
	RLW-001103	RLW-001113	2.1	40.9
	RLW-001105	RLW-001115	3.3	54.4
	RLW-001106	RLW-001116	4.3	59.1
14	RLW-001401	RLW-001411	0.79	32.7
	RLW-001403	RLW-001413	1.6	48.2
	RLW-001405	RLW-001415	2.6	60.6
	RLW-001406	RLW-001416	3.3	66

RLW Reactors

Technical Reference Manual

Reactor Electrical Data, Cont.

RMS Amps	Open PN	NEMA 1	Inductance mH	Watts Loss
21	RLW-002101	RLW-002111	0.53	38.3
	RLW-002103	RLW-002113	1.1	57.4
	RLW-002105	RLW-002115	1.8	73.5
	RLW-002106	RLW-002116	2.2	78
28	RLW-002801	RLW-002811	0.39	48.2
	RLW-002803	RLW-002813	0.82	66.8
	RLW-002805	RLW-002815	1.3	93.8
	RLW-002806	RLW-002816	1.6	110.6
35	RLW-003501	RLW-003511	0.35	68
	RLW-003503	RLW-003513	0.71	102
	RLW-003505	RLW-003515	1.2	121
	RLW-003507	RLW-003517	2.12	204
46	RLW-004601	RLW-004611	0.3	77
	RLW-004603	RLW-004613	0.55	99
	RLW-004605	RLW-004615	0.98	179
	RLW-004607	RLW-004617	1.6	250
55	RLW-005501	RLW-005511	0.27	67
	RLW-005503	RLW-005513	0.48	109
	RLW-005505	RLW-005515	0.75	149
	RLW-005507	RLW-005517	1.33	283
65	RLW-006501	RLW-006511	0.19	87
	RLW-006503	RLW-006513	0.38	105
	RLW-006505	RLW-006515	0.64	214
	RLW-006507	RLW-006517	1.1	191
83	RLW-008301	RLW-008311	0.17	119
	RLW-008303	RLW-008313	0.29	155
	RLW-008305	RLW-008315	0.51	197
	RLW-008307	RLW-008317	0.91	240
104	RLW-010401	RLW-010411	0.12	94
	RLW-010403	RLW-010413	0.23	200
	RLW-010405	RLW-010415	0.375	208
	RLW-010407	RLW-010417	0.67	256
130	RLW-013001	RLW-013011	0.095	132
	RLW-013003	RLW-013013	0.18	152
	RLW-013005	RLW-013015	0.3	197
	RLW-013007	RLW-013017	0.56	480
160	RLW-016001	RLW-016011	0.08	110
	RLW-016003	RLW-016013	0.155	195
	RLW-016005	RLW-016015	0.26	309
	RLW-016007	RLW-016017	0.47	561

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Reactor Electrical Data, Cont.

RMS Amps	Open PN	NEMA 1	NEMA 3R	Inductance mH	Watts Loss
200	RLW-020001	RLW-020011	RLW-020031	0.06	159
	RLW-020003	RLW-020013	RLW-020033	0.115	224
	RLW-020005	RLW-020015	RLW-020035	0.2	293
	RLW-020007	RLW-020017	RLW-020037	0.34	509
250	RLW-025001	RLW-025011	RLW-025031	0.05	275
	RLW-025003	RLW-025013	RLW-025033	0.095	284
	RLW-025005	RLW-025015	RLW-025035	0.16	402
	RLW-025007	RLW-025017	RLW-025037	0.27	465
322	RLW-032201	RLW-032211	RLW-032231	0.05	300
	RLW-032203	RLW-032213	RLW-032233	0.07	383
	RLW-032205	RLW-032215	RLW-032235	0.13	494
	RLW-032207	RLW-032217	RLW-032237	0.225	780
414	RLW-041401	RLW-041411	RLW-041431	0.033	333
	RLW-041403	RLW-041413	RLW-041433	0.066	531
	RLW-041405	RLW-041415	RLW-041435	0.11	588
	RLW-041407	RLW-041417	RLW-041437	0.185	1007
515	RLW-051501	RLW-051511	RLW-051531	0.025	314
	RLW-051503	RLW-051513	RLW-051533	0.05	496
	RLW-051505	RLW-051515	RLW-051535	0.08	695
	RLW-051507	RLW-051517	RLW-051537	0.15	1096
600	RLW-060001	RLW-060011	RLW-060031	0.02	375
	RLW-060003	RLW-060013	RLW-060033	0.04	747
	RLW-060005	RLW-060015	RLW-060035	0.065	780
	RLW-060007	RLW-060017	RLW-060037	0.12	1190
750	RLW-075001	RLW-075011	RLW-075031	0.017	468
	RLW-075003	RLW-075013	RLW-075033	0.035	838
	RLW-075005	RLW-075015	RLW-075035	0.055	858
	RLW-075007	RLW-075017	RLW-075037	0.095	1426

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Outline Drawings

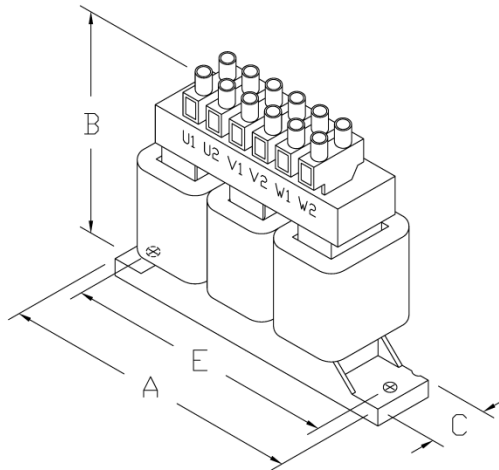


Figure 1 Snap Base Mount

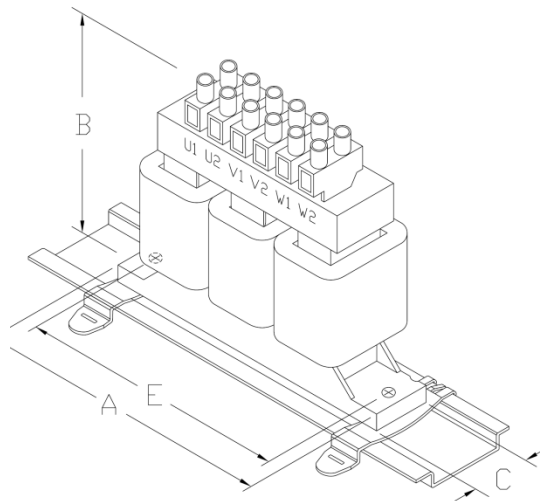


Figure 2 35mm DIN Mount option

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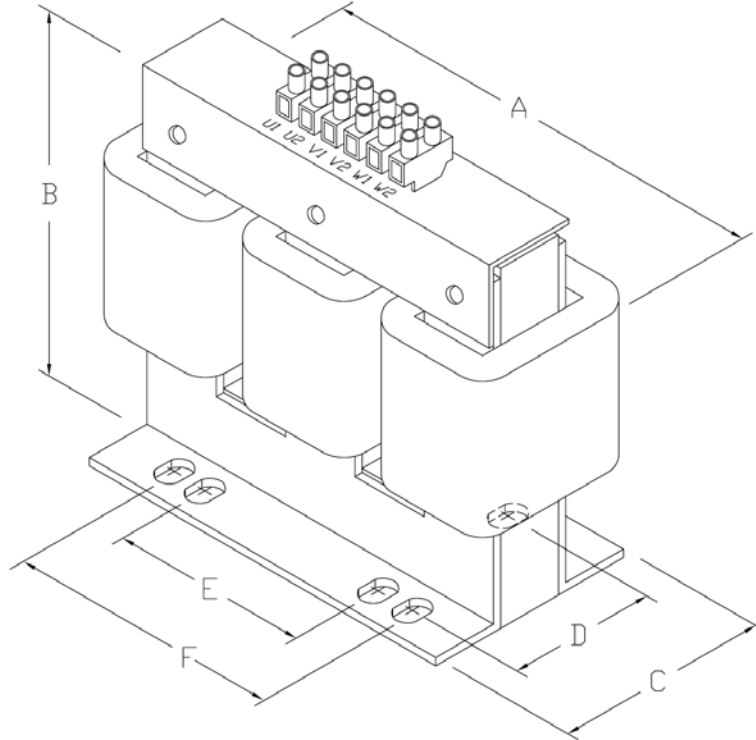


Figure 3 Standard Mounting

See mtecorp.com for complete mechanical details and CAD drawing download.

RLW Reactors

Technical Reference Manual

Outline Drawings

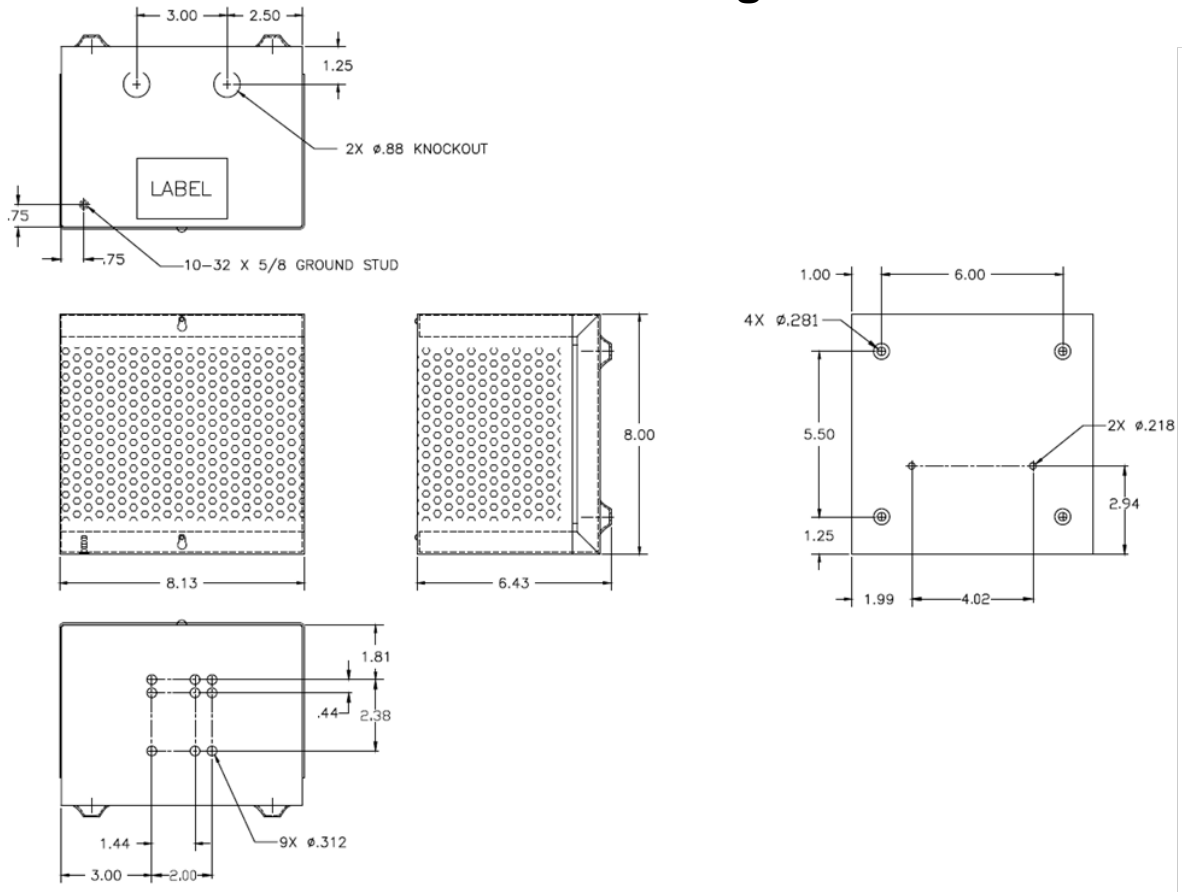


Figure 4 Cab - 8

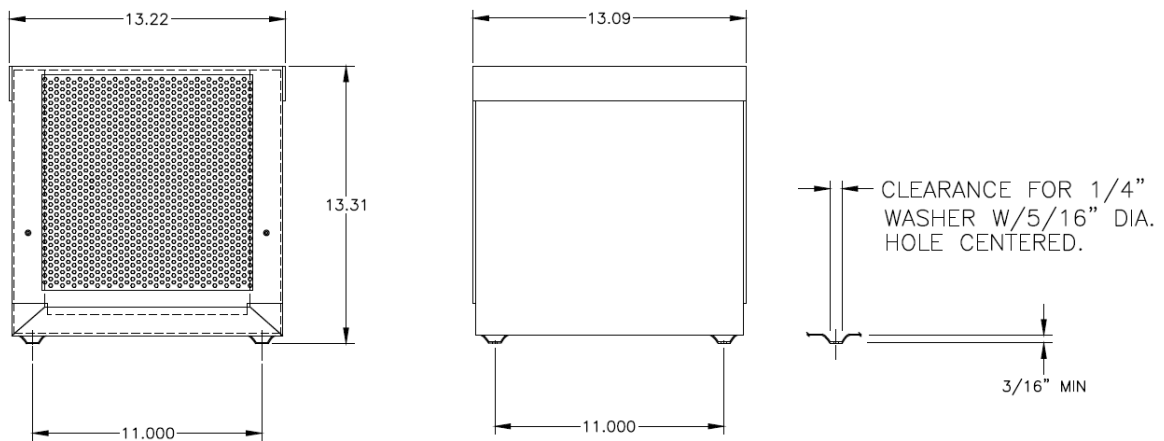


Figure 5 Cab 13V

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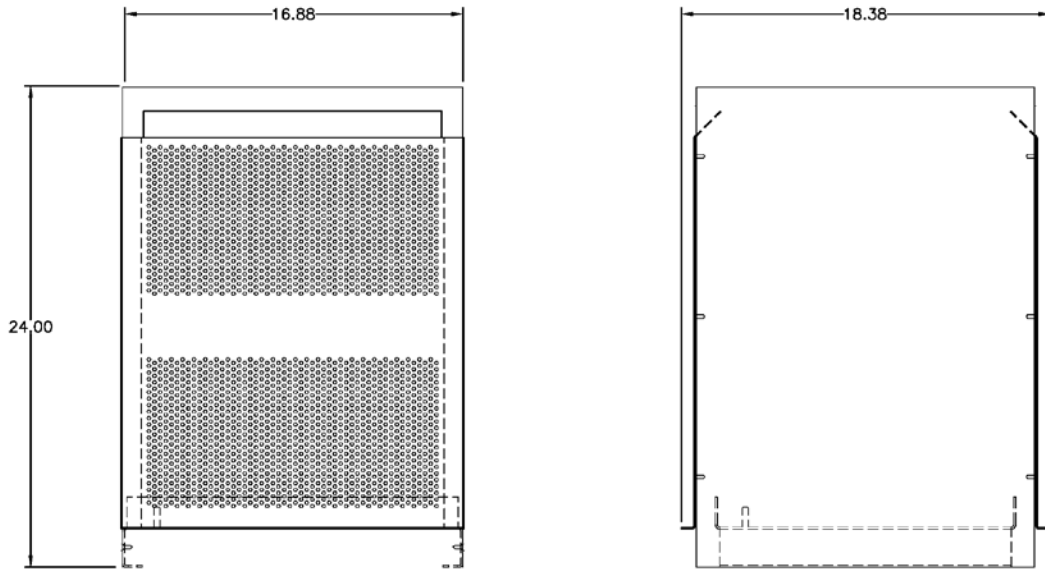


Figure 6 Cab 17V

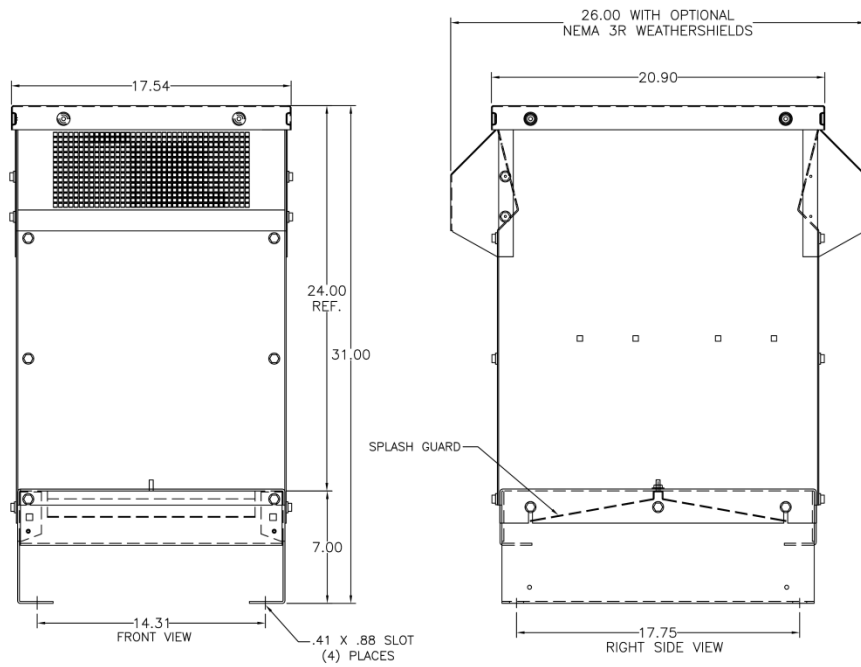


Figure 7 Cab 17C

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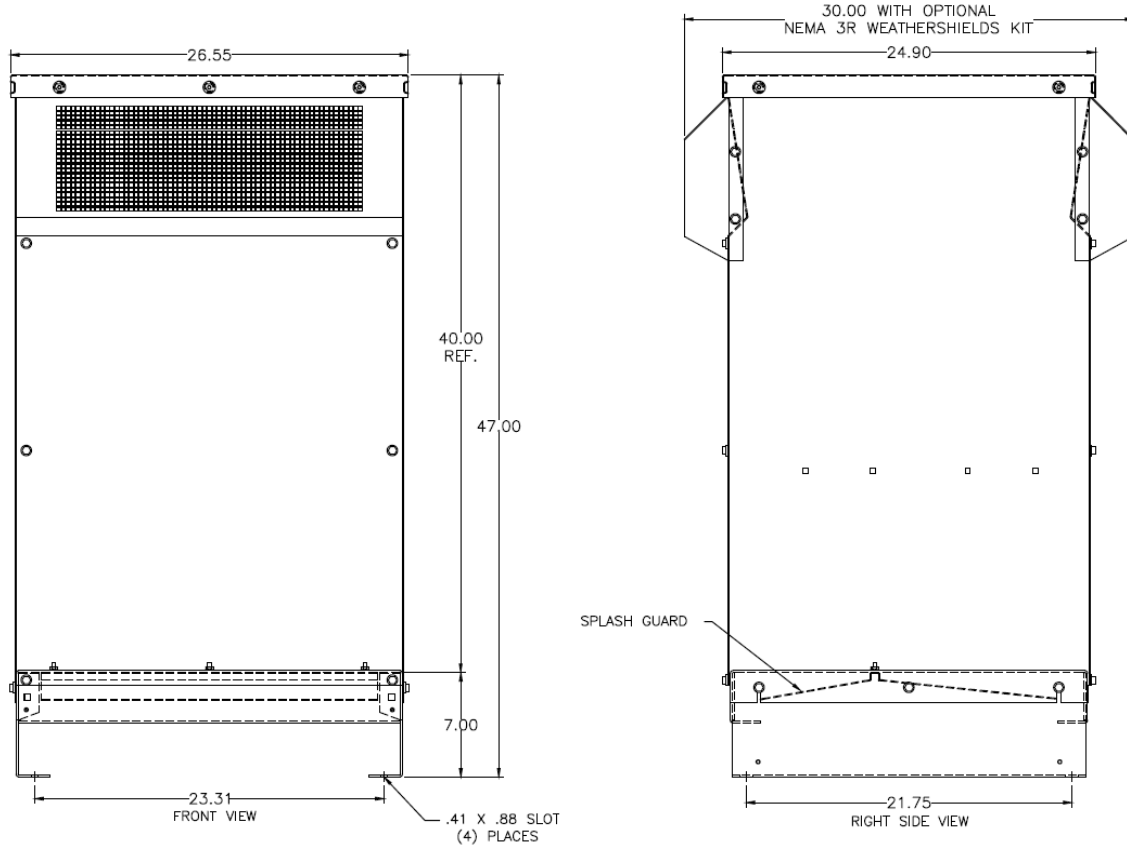


Figure 8 Cab 26C

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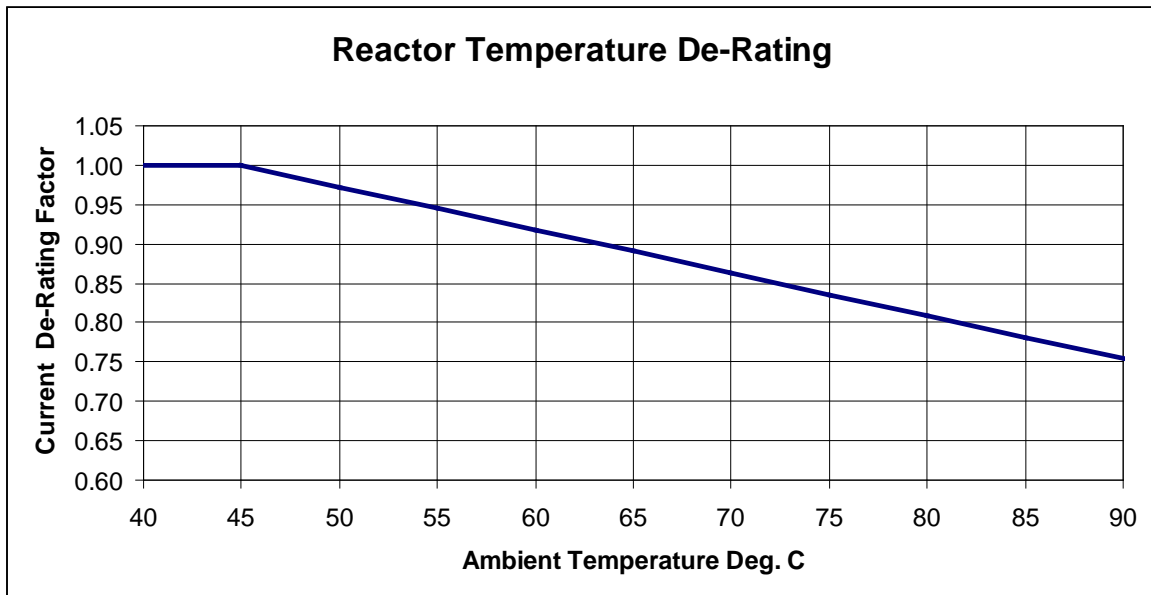
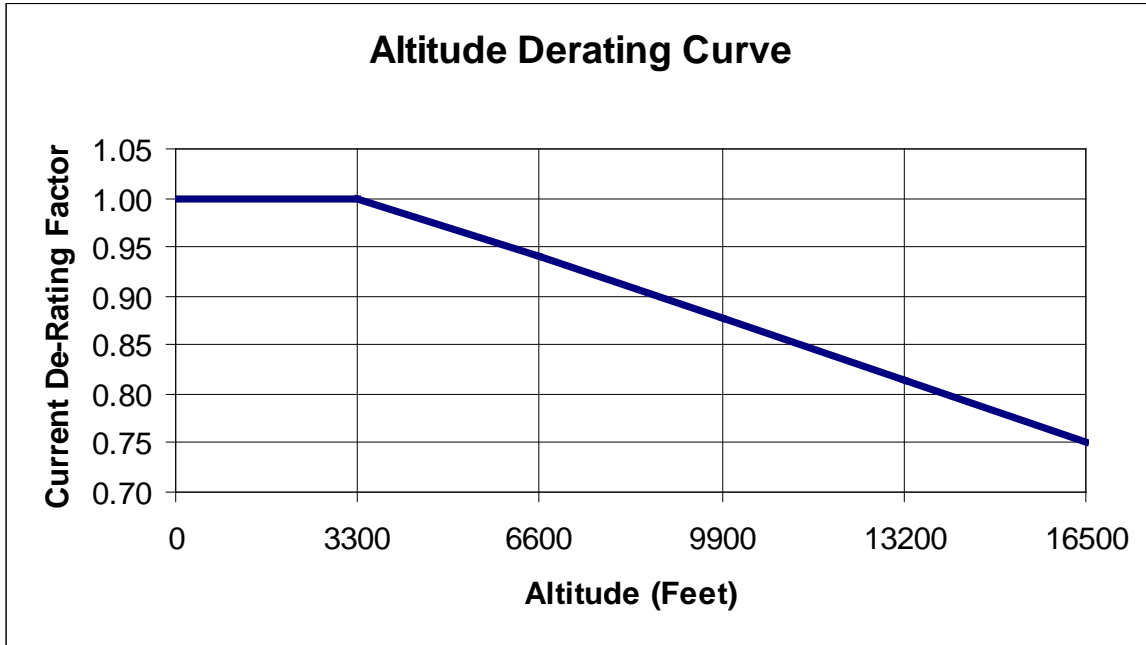
Specification Data

Impedance basis	Calculation: $\% Z = (I/V) \times 2\pi fL\sqrt{3} \times 100$
Service Factor:	
Line (continuous):	100%
Load output side	80% de-rated for 100 foot long lead limit
Overload Rating <i>Line side</i>	150% of RMS rating for 1 minute 200% of RMS rating for 10 seconds
Maximum system voltage	690 Volts
Switching frequency	Maximum 20 KHz Minimum 1 KHz
Insulation system	200° C
Temperature rise	140 C (average)
Ambient temperature	Full load: -40 to 50° C Open -40 to 45° C Enclosed -40 to 90° C Storage
Altitude (de-rate above)	1000 meters 3300 feet
Fundamental frequency	50/60 Hz de-rate above 60 Hz
Inductance tolerance	+/- 10%
Inductance curve (typical)	100% at 100% current 80% at 150% current 50% at 200% current
Dielectric Strength	4000 volts RMS (2200 volts peak repetitive)
Max audible level at two meters:	Line applications: 65 dBa Load applications: 76 dBa
Approvals:	Up to 600V:CE,UL-508,Type RL cUL per CSA C22.2 690V: CE. Consult Factory for UL on 690V
<i>Note: Short circuit rating not required under Exception No.1 of UL508A SB4.2.1 effective 4/25/06</i>	
Enclosures:	MTECab-8, 13V, 17V have NEMA1 Cab 12C and up are NEMA1 rated as NEMA 2 (Indoor rating with ripping water protection) MTE NEMA 3R is a type 3R outdoor rating
DIN Rail Mount:	2 spring steel screw mounts for 35mm rail With 10-32 screws

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De-Rating Curves



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Non Standard Product Request

1. % Impedance _____.
2. Application: Line / load / other: _____.
3. HP or FLA rating _____.
4. Fundamental frequency _____.
5. Harmonic content of load current _____.
6. Overload current and duration _____.
7. Special Reactor tolerance _____.
8. Special Enclosure request _____.
9. Special product approvals _____.
10. Reduced sound level @ two meters _____.

Number of units requested _____

Target date for product delivery _____.



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ISO 7.2.3		RLW AC Line / Load Reactors	RLW-TRM-E
Responsibility:		MTE Corporate	
Approved by:		DB Read	
File Location:		P:\Public\Controlled Documents\Sales\TECHNICAL REFERENCE	
Revision	Date	Revision History	
---	5/29/09	New document written by Wayne Walcott –	
002	8/4/09	WRW Added RL to HP selection pages	
003	8/13/09	WRW remove RL hp from selection table added RLW load selection tables	
004	8/31/09	WRW added phase 2 reactors	
005	9/08/09	Fixed output selection and prices to 250 amp	
006	9/18/09	WRW added Updates for phase 2 & 3	
007	10/7/09	WRW revised label current to match part number amps on data tables	
008	8/1/10	CAB renamed PB-1101 to RLW-TRM, added updates for phase 4, revised CAB drawings	
009	12/1/10	CAB Added Hyperlinks	
010	3/30/11	Fixed Typo in page 17, changed 408 to 480 added de-rating curves	
011	5/10/12	Updated Logo.	