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AHV SERIES

THREE PHASE HIGH PERFORMANCE EMI FILTER

Single stage delta configuration

INTRODUCTION

Chassis for motor drive applications requiring compact space and convenient installation with superior performance at significant interference levels

APPLICATIONS

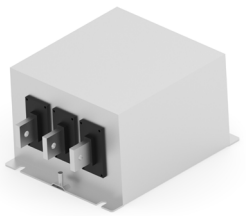
- IT power distribution network
- Three phase drives
- Renewable energy systems
- Process automation equipments
- Energy conversion devices

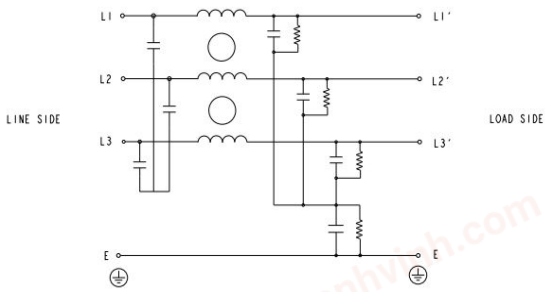
FEATURES

- Superior performance
- Compact
- Low leakage current
- Chassis mounting

APPROVALS & COMPLIANCE

- UL recognized as per UL 60939-3 and CSA22.2 No 8





TYPICAL CIRCUIT DIAGRAM

Specifications

Electrical Characteristics	
Agency Rated Voltage	Line to Line: 760/750VAC
Current Ratings	6A to 1000A @ 40°C
Operating Frequency	50/60Hz
High Potential Test Voltage	Line to Ground: 3535VDC for 1 Minute
	Line to Line: 3268VDC for 1 Minute
Overload Capability	135% of Rated current for 15 minutes

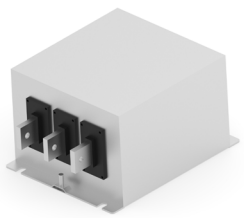
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Functional Characteristics	
Operating Temperature Range	-25°C to +85°C
Climatic Category	25/85/21
Termination	Quick Connect (6A to 100A) Bolt & Nut (125A to 250A) Busbar (320A to 1000A)
Flammability Corresponding to	UL 94 V-0

Reference Standards	
Design Corresponding to	UL 60939-3 and CSA 22.2 No 8

Selection Table – Standard Version



TE Ordering Number	Catalog Number	Rated Current @40°C	Rated Voltage @40°C	Leakage Current (mA)	Weight (Kgs)	Termination Type
2405081-1	6 AHV S FP	6A	760	2mA	3	1
2405081-2	10 AHV S FP	10A	760	2mA	3	1
2405081-3	16 AHV S FP	16A	760	2mA	3	1
2405081-4	20 AHV S FP	20A	760	2mA	3	1
2405081-5	25 AHV S FP	25A	760	2mA	4	1
2405081-6	30 AHV S FP	30A	760	2mA	4	1
2405081-7	40 AHV S FP	40A	760	2mA	4	1
2405081-8	50 AHV S FP	50A	760	2.5mA	5	1
2405081-9	60 AHV S FP	60A	760	3mA	5	1
1-2405081-0	75 AHV S FP	75A	760	3mA	5	1
1-2405081-1	80 AHV S FP	80A	760	3mA	7	1
1-2405081-2	90 AHV S FP	90A	760	3mA	7	2
1-2405081-3	100 AHV S FP	100A	760	3mA	7	2
1-2405081-4	125 AHV S FP	125A	760	3mA	10	M10 STUD
1-2405081-5	150 AHV S FP	150A	760	3mA	10	M12 STUD
1-2405081-6	180 AHV S FP	180A	760	3mA	10	M12 STUD

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TE Ordering Number	Catalog Number	Rated Current @40°C	Rated Voltage @40°C	Leakage Current (mA)	Weight (Kgs)	Termination Type
1-2405081-7	250 AHV S FP	250A	760	3mA	10	M12 STUD
1-2405081-8	300 AHV S FP	300A	760	3mA	15	BUSBAR 6 x 25mm
1-2405081-9	400 AHV S FP	400A	760	3mA	15	BUSBAR 6 x 25mm
2-2405081-0	500 AHV S FP	500A	760	3mA	18	BUSBAR 10 x 25mm
2-2405081-1	600 AHV S FP	600A	760	3mA	18	BUSBAR 10 x 25mm
2-2405081-2	700 AHV S FP	700A	760	3mA	23	BUSBAR 10 x 40mm
2-2405081-3	800 AHV S FP	800A	760	3mA	23	BUSBAR 10 x 40mm
2-2405081-4	1000 AHV S FP	1000A	760	3mA	23	BUSBAR 10 x 40mm

Termination Type: Connectors Cross Section

	1	2	3	4
Range; Flexible (mm^2)	0.5 - 16	10 - 25	16 - 50	35 - 95

Insertion Loss (Typical) – Measured in Closed 50Ω System

		Common Mode 50Ω/50Ω Frequency in MHz								
		0.01	0.05	0.15	0.5	1	3	5	10	30
Current Rating	6A	10.2	24.8	35.5	46.7	49.6	56.3	64.4	44.4	26.3
	10A	7	21	31	40	45	51	62	42	25
	16A	4	13	24	36	40	44	57	36	20
	20A	0.621	10.9	21.3	34.3	38.5	48.2	71.3	43.2	26.5
	25A	0.94	11.8	22	33.3	37	42.3	50.1	36.9	18
	30A	0.92	10.5	22	32	36	43	48	35	22
	40A	0.91	11.7	21.4	29.9	34.4	43.1	57.1	35.3	20.7
	50A	0.75	7.5	18	28	31	40	54	37	20
	60A	0.45	6	18	30	31	40	58	33	18
	75A	0.069	5.91	16.2	27.5	29.7	39.6	72.1	32.6	23.3

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		Common Mode 50Ω/50Ω								
		Frequency in MHz								
		0.01	0.05	0.15	0.5	1	3	5	10	30
Current Rating	80A	0.058	2.1	9.8	21	20	32	58	27	18
	90A	0.04	1.2	6.2	15	17	28	50	25	16
	100A	0.033	0.298	3.68	13	15.6	26.1	47	23.5	14.3
	125A	0.03	0.19	2.5	10	14	25	45	20	13
	150A	0.02	0.5	3	11	14	25	42	18	12
	180A	0.08	0.5	3.5	12	14	22	37	20	13
	250A	0.104	0.52	4.83	15.2	18.4	30.5	40.1	22.6	14
	300A	0.0165	0.0311	0.506	6.19	9.21	21.7	31.6	16.4	8.27
	400A	0.0165	0.0311	0.506	6.19	9.21	21.7	31.6	16.4	8.27
	500A	0.013	0.115	0.731	3.67	8.12	22.9	26.9	14.8	6.1
	600A	0.013	0.115	0.731	3.67	8.12	22.9	26.9	14.8	6.1
	700A	0.0051	0.0184	0.351	4.24	7.62	21.6	27.7	15.1	6.4
	800A	0.0051	0.0184	0.351	4.24	7.62	21.6	27.7	15.1	6.4
	1000A	0.0051	0.0184	0.351	4.24	7.62	21.6	27.7	15.1	6.4

		Differential Mode 50Ω/50Ω								
		Frequency in MHz								
		0.01	0.05	0.15	0.5	1	3	5	10	30
Current Rating	6A	16.2	38.5	82.1	87.6	98.6	81.3	79.6	78.6	71.5
	10A	18	35	75	82	86	78	75	70	67
	16A	15	24	63	74	75	62	59	53	45
	20A	17.2	21.8	57	71.3	73.6	76.4	73.2	70.3	58.6
	25A	17.2	19.5	54	63.5	64.9	64.7	61.9	59.2	44.4
	30A	18	25	50	60	63	62	57	55	45
	40A	17.23	27.8	43.5	60.1	61.5	61.9	61.6	60.9	59.8
	50A	20	25	45	65	67	62	55	50	35
	60A	22	28	45	62	65	54	48	42	31
	75A	25.4	33.8	64.3	72.4	64.4	53.4	50.7	47.9	37.8
	80A	25	34	60	68	58	50	48	42	32
	90A	25	34	52	60	50	42	40	38	30

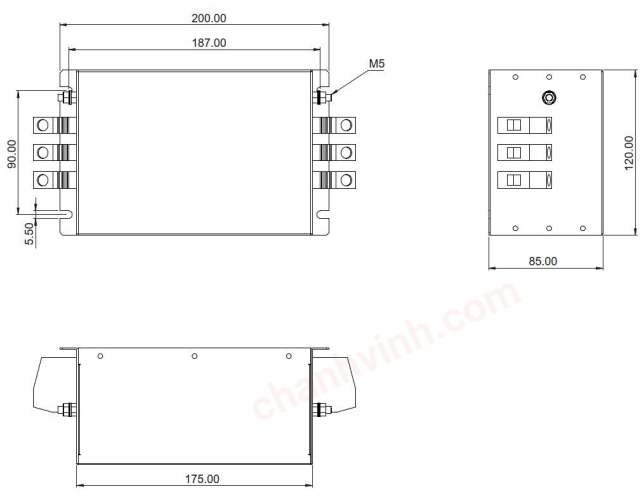
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Single stage delta configuration

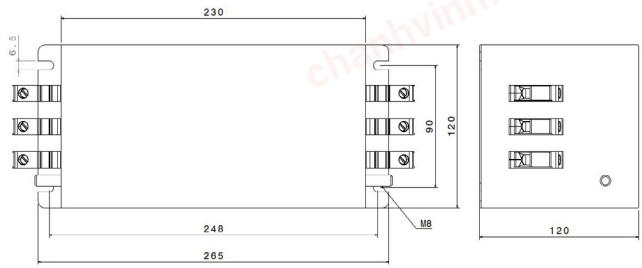
		Differential Mode 50Ω/50Ω								
		Frequency in MHz								
		0.01	0.05	0.15	0.5	1	3	5	10	30
Current Rating	100A	25.6	38.8	46.2	55	47.6	39.3	36.9	34.3	26.4
	125A	22	36	42	50	42	35	36	30	22
	150A	23	36	45	51	40	31	33	32	20
	180A	22	35	48	53	45	32	30	29	20
	250A	25.6	38	51.5	55.8	48.6	40.4	37.8	35	24.4
	300A	25.5	38.8	49.5	46.2	38.7	30.3	27.6	24.8	17.1
	400A	25.5	38.8	49.5	46.2	38.7	30.3	27.6	24.8	17.1
	500A	25.5	39.1	51.6	43.1	36.2	28	25.3	22.6	15.1
	600A	25.5	39.1	51.6	43.1	36.2	28	25.3	22.6	15.1
	700A	25.5	39.4	58.4	45.3	37.8	29.5	26.9	24.2	17.3
	800A	25.5	39.4	58.4	45.3	37.8	29.5	26.9	24.2	17.3
	1000A	25.5	39.4	58.4	45.3	37.8	29.5	26.9	24.2	17.3

Mechanical Diagram

6A to 40A



50A to 80A

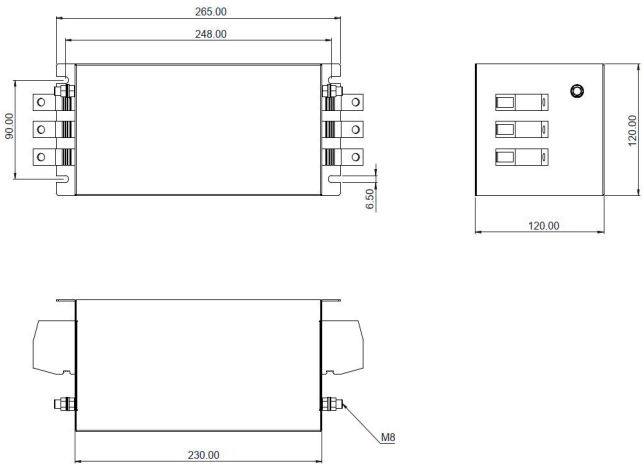


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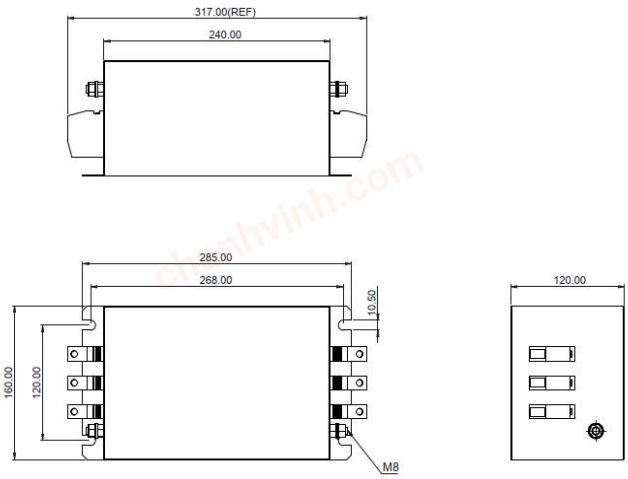
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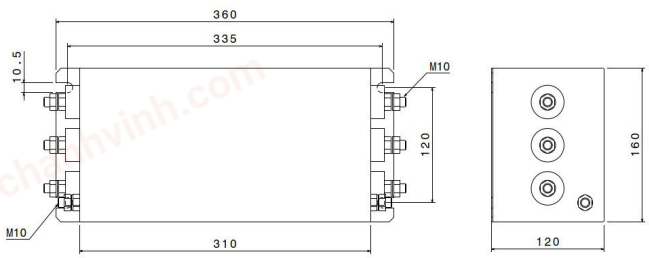
90A



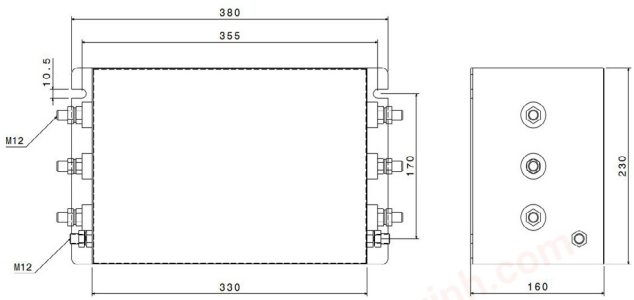
100A



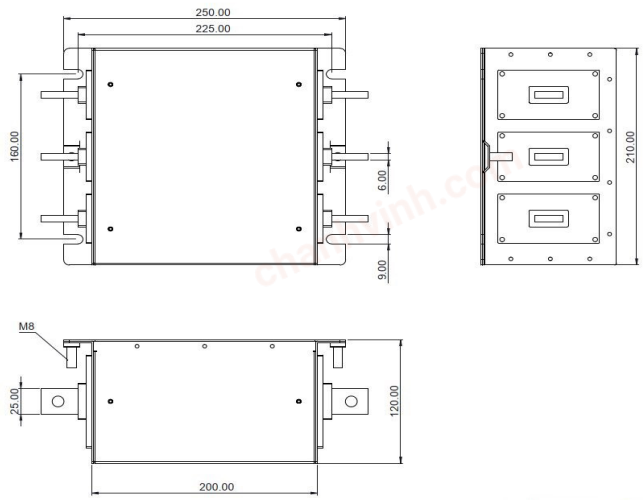
125A



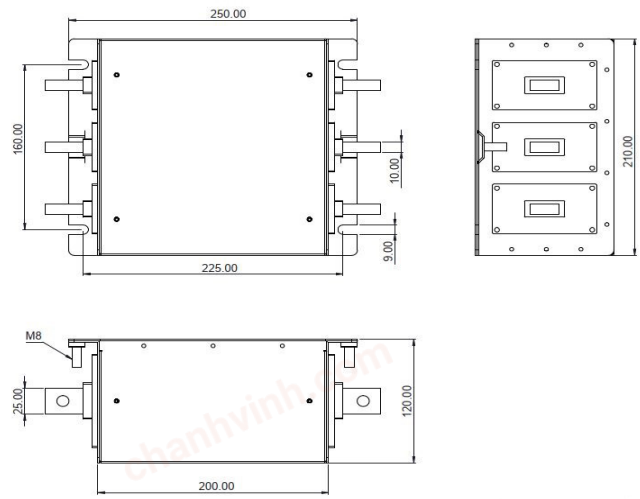
150A to 250A



300A and 400A

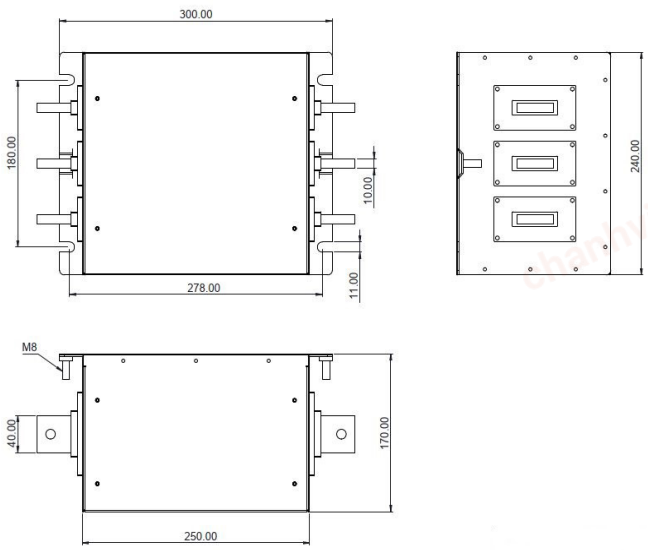


500A and 600A



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700A to 1000A



HOW TO ORDER

Part Number
10 - AHV - S FP

Current Rating
10

Series Type
AHV

Filter Stage
S Single

Fully Potted
FP

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08/22 TJ