

AHV SERIES

THREE PHASE VERY HIGH PERFORMANCE EMI FILTER

Dual stage delta configuration

INTRODUCTION

Bookshelf design for motor drive applications requiring minimum space and convenient installation with superior performance at significant interference levels

APPLICATION

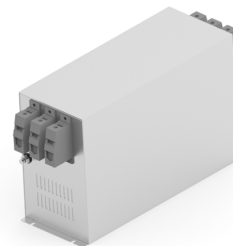
- IT power distribution network
- Three phase drives
- Renewable energy systems
- Process automation equipments
- Energy conversion devices

FEATURES

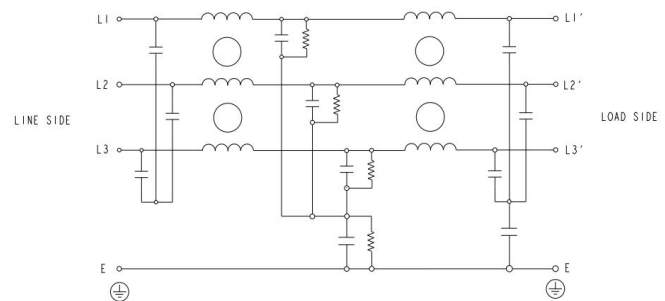
- Superior performance
- Compact
- Low leakage current
- Book shelf mounting

APPROVALS & COMPLIANCE

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



STANDARD



TYPICAL CIRCUIT
DIAGRAM

Specifications

Electrical Characteristics	
Agency Rated Voltage	Line to Line: 760/750VAC
Current Ratings	7A to 180A @ 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

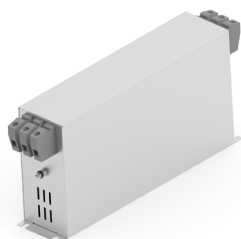
AHV Series

Dual Stage Delta Configuration

Functional Characteristics	
Operating Temperature Range	-25°C to +85°C
Climatic Category	25/85/21
Termination (Depends on Current Rating)	Quick Connect 7A to 180A
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
2405080-1	7 AHV D BS	7A	760	5mA	2	1
2405080-2	10 AHV D BS	10A	760	5mA	2	1
2405080-3	16 AHV D BS	16A	760	5mA	3	1
2405080-4	20 AHV D BS	20A	760	5mA	3	1
2405080-5	25 AHV D BS	25A	760	5mA	3	1
2405080-6	30 AHV D BS	30A	760	5mA	4	1
2405080-7	42 AHV D BS	42A	760	5mA	4	1
2405080-8	55 AHV D BS	55A	760	5mA	4	1
2405080-9	63 AHV D BS	63A	760	6mA	5	1
1-2405080-0	75 AHV D BS	75A	760	6mA	5	1
1-2405080-1	80 AHV D BS	80A	760	6mA	5	1
1-2405080-2	90 AHV D BS	90A	760	6mA	6	2
1-2405080-3	100 AHV D BS	100A	760	6mA	6	2
1-2405080-4	130 AHV D BS	130A	760	6mA	7	3
1-2405080-5	150 AHV D BS	150A	760	6mA	8	3
1-2405080-6	180 AHV D BS	180A	760	6mA	12	4

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Dual Stage Delta Configuration

Termination Type: Connectors Cross Section

	1	2	3	4
Range; Flexible (mm²)	0.5 - 16	10 - 25	16 - 50	35 - 95

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

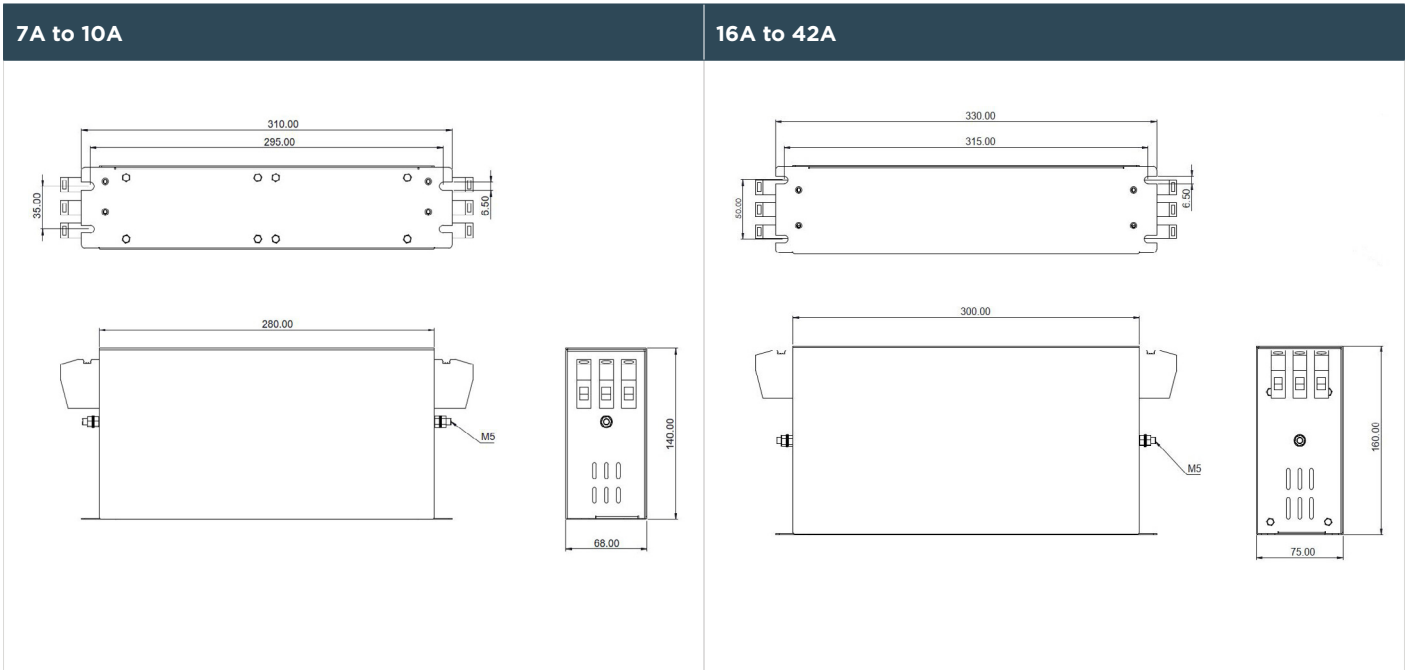
		Common Mode 50Ω/50Ω								
		Frequency in MHz								
		0.01	0.05	0.15	0.5	1	3	5	10	30
Current Rating	7A	14.1	28.7	64	78.3	77	68.3	60	48.1	37.8
	10A	12	21	60	80	70	62	56	45	25
	16A	10.5	15.6	58.3	97.9	79.6	61.4	54	44.2	19.5
	20A	9	12	55	80	75	57	52	42	15
	25A	8.28	10.9	50.4	76.6	80.1	62.6	55.6	44.5	30.4
	30A	5.6	7	35	60	68	57	44	32	18
	42A	2.3	5.6	27.2	60	65	52	42	30	20
	55A	1.03	9.65	25.7	58.9	73.4	63.4	56.4	47.6	44.8
	63A	0.88	5.2	23.4	57	68	58	52	42	38
	75A	0.75	3.5	19.5	51	62	55	48	35	22
	80A	0.52	2	10	35	40	47	41	30	18
	90A	0.3	1.2	6	28	41	50	40	28	20
	100A	0.178	0.794	4.29	18.3	30.5	51.2	45.9	39.9	25.5
	130A	0.16	0.9	4.5	20	32	55	40	32	20
	150A	0.15	1.1	4.5	22	35	55	38	30	21
	180A	0.162	1.27	4.73	33.5	41.6	54.4	48.3	40.8	25.3

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		Differential Mode 50Ω/50Ω								
		Frequency in MHz								
		0.01	0.05	0.15	0.5	1	3	5	10	30
Current Rating	7A	16.2	34.7	60.4	58.4	57.9	56.6	55.7	54.4	46.2
	10A	18	28	55	56	62	60	57	50	42
	16A	17.1	22.9	70.1	77.3	80.4	80.8	79.6	79.5	57.6
	20A	18	20	55	50	62	65	60	50	32
	25A	17.7	18.6	34.7	23.5	17.5	12.2	7.4	9.6	25.5
	30A	15	18	27	62	68	20	18	15	12
	42A	12	25	30	65	68	18	14	13	10
	55A	18.2	27	32.6	80.3	97.4	78.6	75.3	72.4	63.8
	63A	16	25	29	75	80	70	68	64	42
	75A	13.6	22.3	27	70	76	67	63	61	37
	80A	10	18	24	67	70	55	50	47	31
	90A	12	22	28	57	60	50	45	38	24
	100A	29	40.4	61.4	65	53.8	45	42.6	40.1	32.3
	130A	25	35	58	67	55	47	41	38	30
	150A	25	37	60	63	56	48	42	40	27
	180A	29	38.3	65	65	58.4	50.87	48.4	45.8	37

Mechanical Diagram

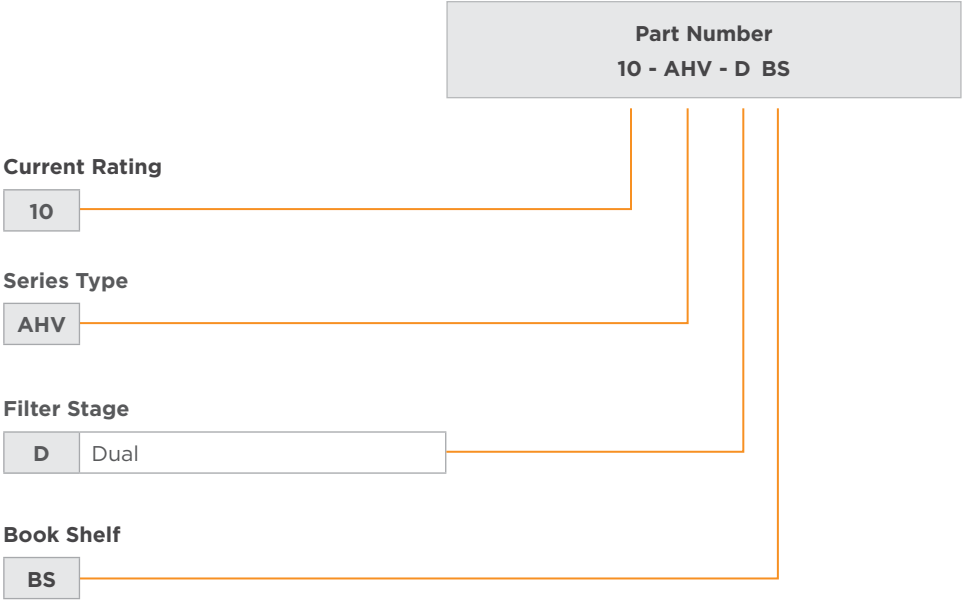


AHV Series

Dual Stage Delta Configuration

55A Top view dimensions: 315.00 (width), 50.00 (height), 6.50 (depth). Front view dimensions: 300.00 (width), 330.00 (depth), M6 (mounting hole). Rear view dimensions: 166.00 (height), 75.00 (width).	63A to 80A Top view dimensions: 410.00 (width), 55.00 (height), 6.50 (depth). Front view dimensions: 395.00 (width), 425.00 (depth), M6 (mounting hole). Rear view dimensions: 190.00 (height), 95.00 (width).
90A Top view dimensions: 425.00 (width), 410.00 (inner width), 55.00 (height), 6.50 (depth). Front view dimensions: 395.00 (width), M6 (mounting hole). Rear view dimensions: 190.00 (height), 95.00 (width).	100A Top view dimensions: 440.00 (width), 455.00 (inner width), 55.00 (height), 6.50 (depth). Front view dimensions: 502.00(REF) (width), 425.00 (depth), M10 (mounting hole). Rear view dimensions: 240.00 (height), 98.00 (width).
130A and 150A Top view dimensions: 425.00 (width), 440.00 (inner width), 105.00 (height), 6.50 (depth). Front view dimensions: 410.00 (width), M10 (mounting hole). Rear view dimensions: 270.00 (height), 165.00 (width).	180A Top view dimensions: 425.00 (width), 410.00 (inner width), 105.00 (height), 6.50 (depth). Front view dimensions: 410.00 (width), 440.00 (depth), M10 (mounting hole). Rear view dimensions: 270.00 (height), 165.00 (width).

HOW TO ORDER



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