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AHV SERIES

THREE PHASE HIGH PERFORMANCE EMI FILTER

Single stage delta configuration

INTRODUCTION

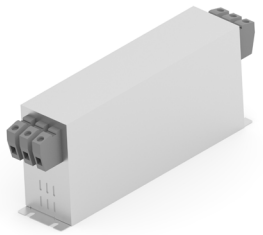
Bookshelf design for motor drive applications requiring minimum space and convenient installation with superior performance at significant interference levels

APPLICATION

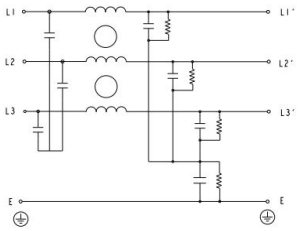
- IT power distribution network
- Three phase drives
- Renewable energy systems
- Process automation equipments
- Energy conversion devices

FEATURES

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



STANDARD



TYPICAL CIRCUIT DIAGRAM

APPROVALS AND COMPLIANCE

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

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% Rated current for 15 minutes

AHV Series

Single 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 Type
2405077-1	7 AHV S BS	7A	760	2.5mA	2	1
2405077-2	10 AHV S BS	10A	760	2.5mA	2	1
2405077-3	16 AHV S BS	16A	760	2.5mA	3	1
2405077-4	20 AHV S BS	20A	760	2.5mA	3	1
2405077-5	25 AHV S BS	25A	760	2.5mA	3	1
2405077-6	30 AHV S BS	30A	760	2.5mA	4	1
2405077-7	40 AHV S BS	40A	760	2.5mA	4	1
2405077-8	50 AHV S BS	50A	760	2.5mA	4	1
2405077-9	63 AHV S BS	63A	760	3mA	5	1
1-2405077-0	75 AHV S BS	75A	760	3mA	5	1
1-2405077-1	80 AHV S BS	80A	760	3mA	5	1
1-2405077-2	90 AHV S BS	90A	760	3mA	6	2
1-2405077-3	100 AHV S BS	100A	760	3mA	6	2
1-2405077-4	125 AHV S BS	125A	760	3mA	7	3
1-2405077-5	150 AHV S BS	150A	760	3mA	8	3
1-2405077-6	180 AHV S BS	180A	760	3mA	12	4

AHV Series

Single Stage Delta Configuration

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	7A	10.3	24.9	36.3	46.9	45.9	49.1	58.5	38.5	16.6
	10A	8.0	22.0	32.0	40.0	39.0	42.0	52.0	30.0	10.0
	16A	6.0	20.0	30.0	35.0	37.0	39.0	40.0	25.0	15.0
	20A	4.0	18.0	26.0	35.0	34.0	37.0	41.0	23.0	14.0
	25A	3.9	17.5	28.8	34.6	34.9	38.2	46.4	30.2	16.1
	30A	2.5	16.0	26.0	31.0	32.0	34.0	40.0	30.2	15.0
	40A	1.0	10.0	20.0	29.0	30.0	37.0	52.0	32.0	17.0
	50A	0.0	7.2	16.8	27.9	32.6	42.1	55.9	37.1	20.9
	63A	0.3	7.2	14.0	25.0	30.0	38.0	49.0	35.0	19.0
	75A	0.1	3.6	12.9	23.7	25.9	35.1	48.4	33.7	22.1
	80A	0.2	2.5	8.0	10.0	21.0	31.0	42.0	25.0	13.0
	90A	0.1	1.0	5.0	7.0	18.0	24.0	34.0	22.0	15.0
	100A	0.1	0.5	2.8	8.1	13.2	25.1	44.5	24.3	14.6
	125A	0.1	0.5	3.0	6.0	14.0	24.0	40.0	25.0	12.0
	150A	0.1	0.3	4.0	7.0	12.0	26.0	38.0	20.0	10.0
	180A	0.1	0.5	4.6	15.5	18.5	30.4	43.1	23.4	13.9

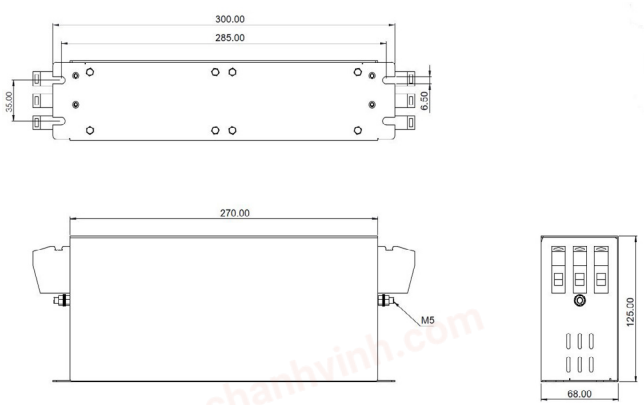
AHV Series

Single Stage Delta Configuration

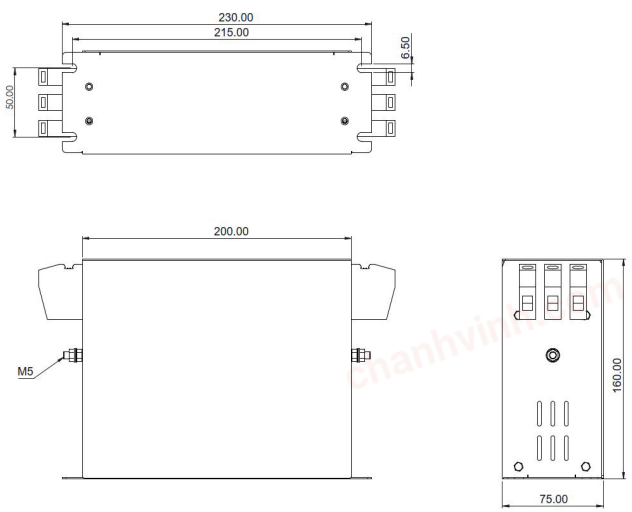
		Differential Mode 50Ω/50Ω								
		Frequency in MHz								
		0.01	0.05	0.15	0.5	1	3	5	10	30
Current Rating	7A	13.9	33.2	66.5	68.4	73.2	88.8	78.1	77.9	46.1
	10A	10.0	25.0	58.0	65.0	66.0	79.0	70.0	65.0	36.0
	16A	7.0	20.0	50.0	67.0	61.0	72.0	65.0	61.0	25.0
	20A	11.0	19.0	48.0	70.0	63.0	65.0	60.0	58.0	22.0
	25A	14.7	21.5	54.7	77.5	65.5	56.3	54.3	55.0	18.2
	30A	13.0	25.0	40.0	65.0	67.0	46.0	50.0	48.0	24.0
	40A	10.0	24.0	34.0	65.0	68.0	43.0	50.0	46.0	27.0
	50A	14.8	26.6	38.8	64.3	58.2	49.6	47.4	44.6	36.0
	63A	16.0	29.0	42.0	55.0	50.0	41.0	45.0	40.0	30.0
	75A	23.7	34.0	71.8	64.0	55.1	46.3	43.8	41.1	32.3
	80A	18.0	24.0	64.0	42.0	38.0	40.0	31.0	26.0	18.0
	90A	19.0	26.0	60.0	47.0	40.0	35.0	32.0	29.0	18.0
	100A	25.7	39.1	62.1	48.1	41.3	33.4	30.9	28.3	21.9
	125A	18.0	30.0	68.0	37.0	44.0	35.0	25.0	22.0	16.0
	150A	20.0	28.0	60.0	40.0	33.0	29.0	21.0	18.0	14.0
	180A	25.5	38.4	64.0	47.0	39.4	31.2	28.7	25.9	17.6

Mechanical Diagram

7A to 10A



16 to 40A

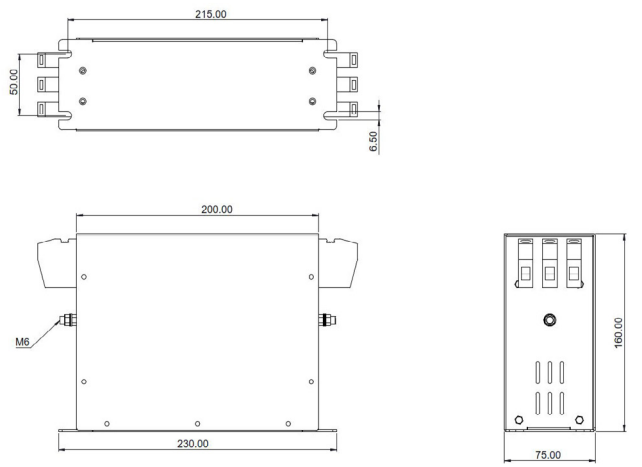


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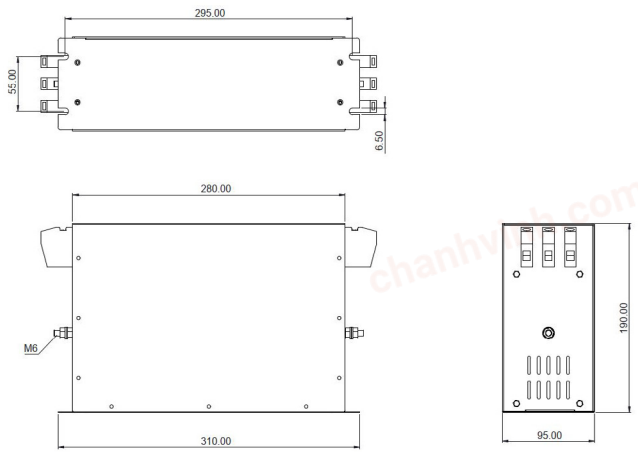
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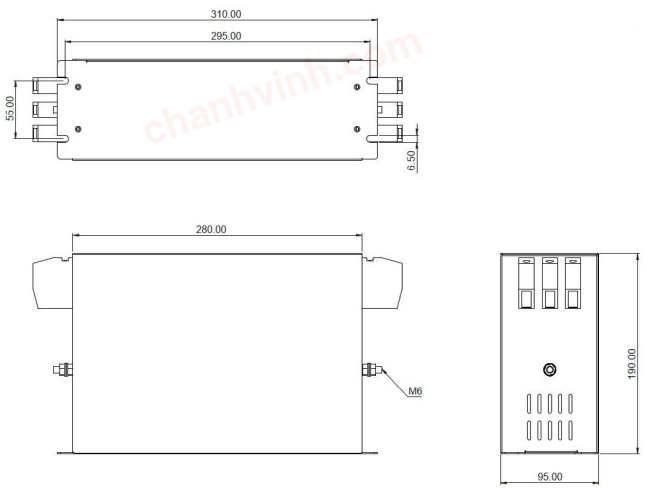
50A



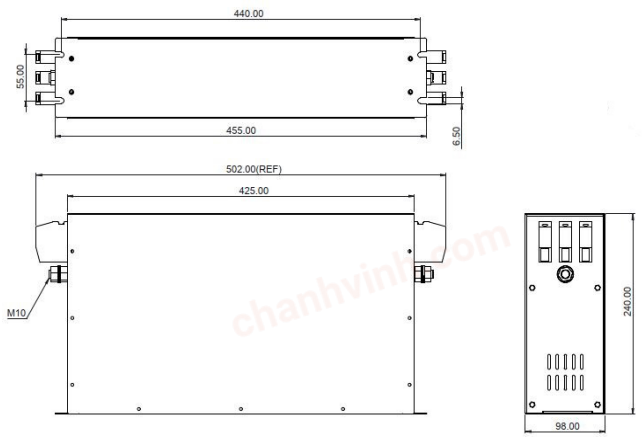
63A to 80A



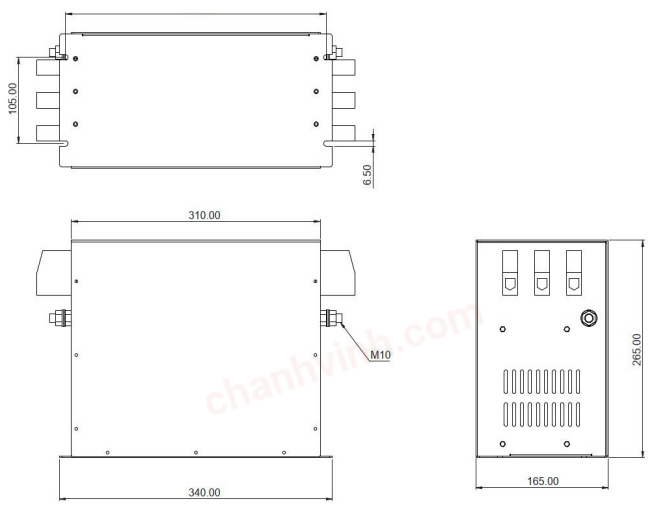
90A



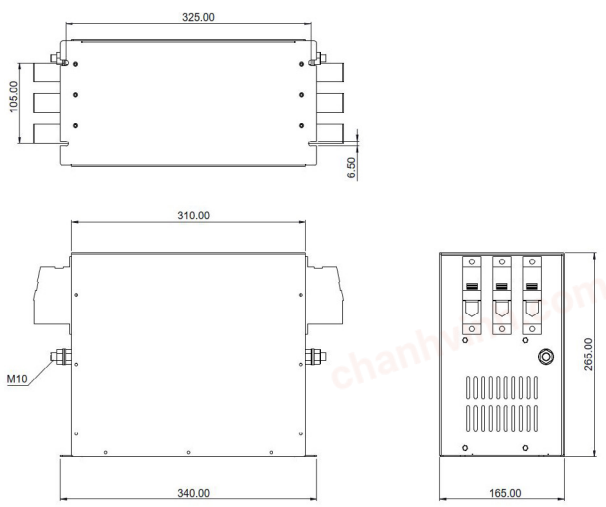
100A



125A and 150A



180A



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HOW TO ORDER

Part Number
10 - AHV - S BS

Current Rating

10

Series Type

AHV

Filter Stage

S	Single

Book Shelf

BS

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08/22 TJ