

## ACCESSORIES

# OUTPUT FILTERS

Output filters are used:

- to reduce the dangerous overvoltages that are generated in the motor cable according to its length and which can prematurely damage both the motor windings and the inverter itself.
- to improve the efficiency of the engine and reduce its heating.
- to reduce electromagnetic disturbances in the surrounding environment.

The output filters are offered with IP00 or IP23 degree of protection. IP54 available on request.

There are two basic types of output filters:

- dV / dt filters: for motor cables up to 150 m (PWM 2.5 kHz)
- sinusoidal filters: for motor cables up to 400 m (PWM 4 kHz) or to suppress electromagnetic disturbances.

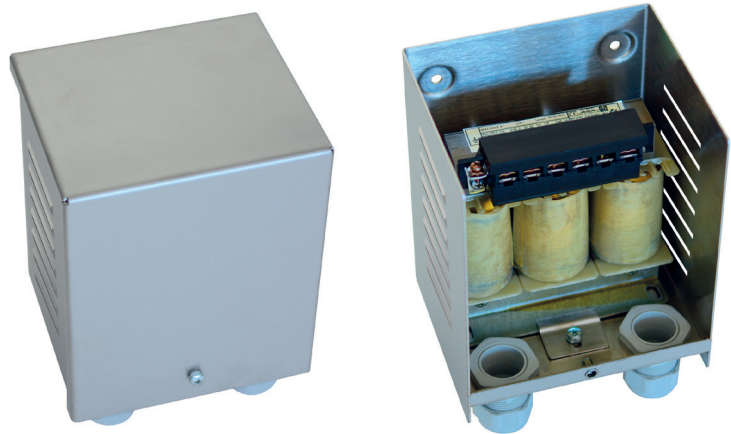
## dV/dt output filters

### Technical features

- Working frequency: 50-60 Hz
- Compliance with IEC-61558-2-20
- Insulation class: Class F
- Maximum ambient working temperature: 40 °C
- Ventilation: natural
- Insulation: 3kV

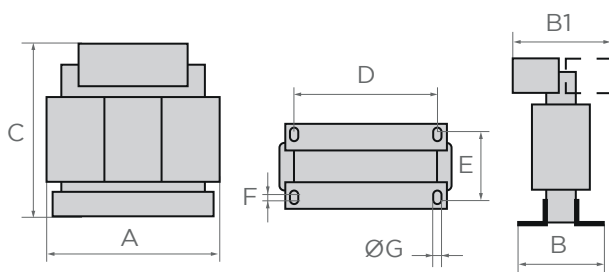
In A	V VAC	P VAR	L mH
14 (7)	3 x 190 - 520	77,5 (39)	0,42
32 (14)	3 x 190 - 520	177,5 (78)	0,184
90 (48)	3 x 190 - 520	496 (265)	0,065
280	3 x 190 - 520	1543	0,021

(IP54)

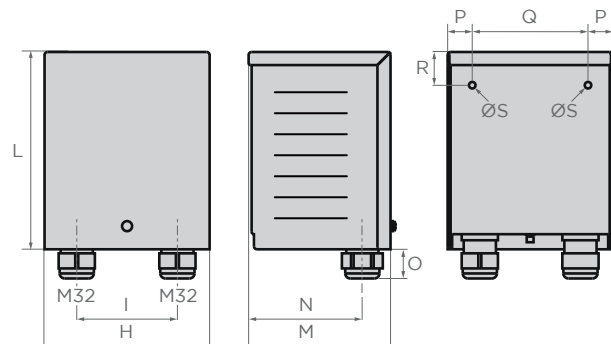


### Dimensions and weights

#### Filter IP00



#### Filter IP23 (IP54)



In A	A mm	B (B1) mm	C mm	D mm	E mm	F mm	G mm	kg IP00	H mm	I mm	L mm	M mm	N mm	O mm	P mm	Q mm	R mm	S mm	kg IP23 IP54
14 (7)	120	67	115	100	60	5	5,5	2,7	164	100	196	141	113	29	24,5	115	33	6,5	4,2
32 (14)	140	75	150	125	58	5	5,5	3,5	164	100	196	141	113	29	24,5	115	33	6,5	5
90 (48)	180	100 (120)	200	150	80	10	6,5	8	264	170	339	211	178	30	29,5	205	33	6,5	11,5
280	td	td	td	td	td	td	td	23	-	-	-	-	-	-	-	-	-	-	-

(IP54)

# Sinusoidal output filters

## Technical features

- Working frequency: 50-60 Hz
- Compliance with IEC-61558-2-20
- Insulation class: Class F
- Maximum ambient working temperature: 40 °C
- Ventilation: natural
- Insulation: 3kV



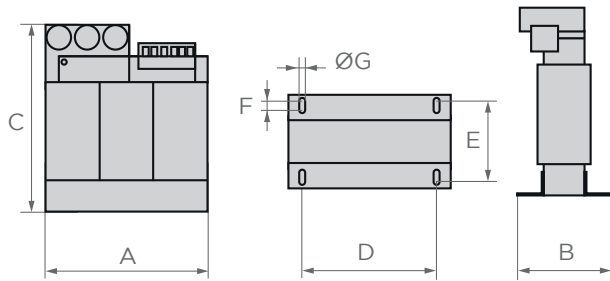
In A	V VAC	P VAR	L mH
14 (7)	3 x 190 - 520	738 (369)	4
32 (14)	3 x 190 - 520	1923 (841)	2
48	3 x 190 - 520	2592	1,1
115	3 x 190 - 520	6229	0,5
280	3 x 190 - 520	15120	0,021

(IP54)

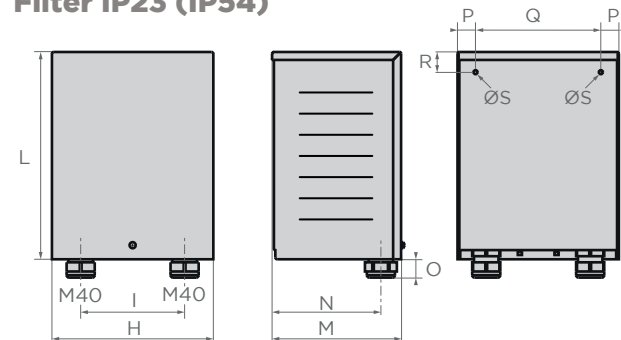


## Dimensions and weights

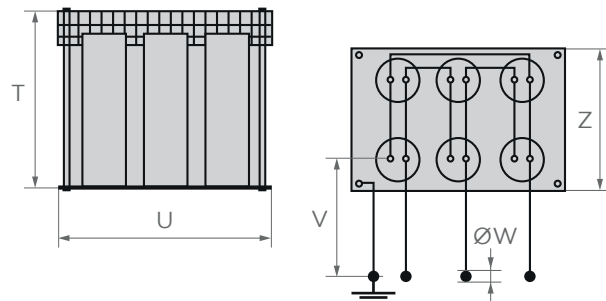
### Filter IP00



### Filter IP23 (IP54)



### Additional capacitors box



In A	A mm	B mm	C mm	D mm	E mm	F mm	G mm	kg IP00	H mm	I mm	L mm	M mm	N mm	O mm	P mm	Q mm	R mm	S mm	kg IP23 IP54	T mm	U mm	V mm	W mm	Z mm
14 (7)	180	105	210	150	90	10	6,5	10	264	170	339	211	178	30	29,5	205	33	6,5	13,5	-	-	-	-	-
32 (14)	240	115	280	200	95	10	6,5	17,5	264	170	339	211	178	30	29,5	205	33	6,5	21	-	-	-	-	-
48	240	145	290	200	125	10	10	24,8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
115	300	150	285	250	135	10	10	42	-	-	-	-	-	-	-	-	-	-	-	225	320	800	8	230
280	td	td	td	td	td	td	td	115	-	-	-	-	-	-	-	-	-	-	-	td	td	td	td	td

(IP54)

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