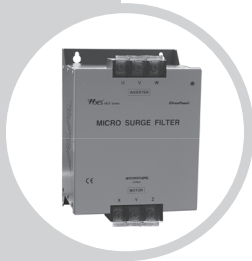


MSF

인버터 후단용 마이크로 서지필터

Micro Surge Filter(MSF)



사양

Specification148

결선 및 외형치수

Connection & Dimension149

인버터 후단용 마이크로 서지 필터

● Feature

• 인버터 후단용 마이크로 서지필터를 적용해야하는 중요 이유

전력 산업의 기술 발달로 인하여 전력용 제어 반도체 소자의 스위칭(PWM방식) 가능해짐에 따라 모터 구동시 성능이 향상되는 반면에 dv/dt 영향으로 모터를 소손시키는 문제를 일으킵니다. 인버터 출력 전압이 모터에 가해지면 인버터와 모터를 연결하는 전원선 길이에 따라서 약2배 이상 되는 서지전압이 인가되고 스위칭 방법에 따라서는 전압의 약3배 이상 발생할 수 도있어 모터의 절연파괴 현상발생, Micro Surge 전압 발생으로 모터수명 단축 및 소손발생, 모터에 누설전류가 발생할 수 있고, EMI에 노출 (Radio Frequency등 전자파 장애가 발생하여 심각한 손상을 일으킬 수 있습니다.

The generation of micro surge voltages due to a dielectric breakdown phenomenon in a motor can shorten the lifespan of the motor and cause a burn and a leakage current to the motor. At this time, there happen noises to cause an electromagnetic interference such as radio frequency and so on by being exposed to EMI, so install a noise filter at the inverter output terminal to minimize the length of cables between an inverter and a motor, and install a micro surge filter to maintain the installation spacing between an electric cable and a signal wire on the inverter peripherals.



● Specifications

ITEMS	SYMBOL	WYMSF4 -0.75~3.7S	WYMSF4 -5.5~30S	WYMSF4 -37~132S	WYMSF4 -160~220S	WYMSF4 -300S	WYMSF4 -1.5~3.7L	WYMSF4 -5.5~30L	WYMSF4 -37~132L	WYMSF4 -160~220L	WYMSF4 -300L
Inverter	kW	0.75/1.5/ 2.2/3.7	5.5/11/ 18.5/22/30	37/55/75/ 110/132	160/220	300	1.5/2.2/ 3.7	5.5/11/ 18.5/22/30	37/55/75/ 110/132	160/220	300
Available Distance (Max.)	m	100(Max.) Standard type "S" Type					300(Max.) "L" Type				
Rated Voltage	V	220, 380/440									
Rising time	μS	More than 2									
Line Reactance	%	Less than 2~3% Z									
Inverter Carrier Frequency	KHz	6 (이외 주파수는 당사와 협의요망)									
Over Load	℃	Rated Current*150%/1min									
Insulation Rasistance	MΩ	More than DC500V/500MΩ									
Dielectric Withstand	V	AC2000V/1min									
Operating Temperature	℃	-20~ +40℃									

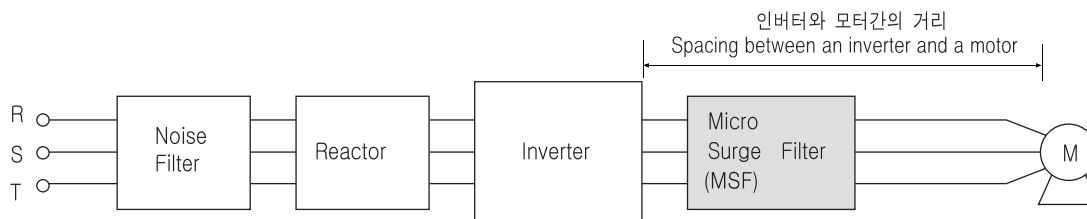
인버터 후단용 마이크로 서지 필터

● AC 380/440V

MODEL	용량(kW)	Rated Voltage	Dimensions(mm)								Weight (kg)	
			W	H	D	a	b	c	Ø	M	S	L
WYMSF4-0,75S WYMSF4-0,75L	1,5	380/440V	163	220	130,5	205	120		5,5	6	3	3,2
WYMSF4-1,5S WYMSF4-1,5L	1,5										3,2	3,5
WYMSF4-2,2S WYMSF4-2,2L	2,2										3,6	3,8
WYMSF4-3,7S WYMSF4-3,7L	3,7										4,8	5,1
WYMSF4-5,5S WYMSF4-5,5L	5,5		220 (S) 280 (L)	322 (S) 400 (L)	151 (S) 174 (L)	304 (S) 382 (L)	140 (S) 180 (L)	-	6,5	8,5	5,6	5,9
WYMSF4-7,5S WYMSF4-7,5L	7,5										7,5	8,5
WYMSF4-11S WYMSF4-11L	11										9,3	11,2
WYMSF4-18,5S WYMSF4-18,5L	18,5										22	25
WYMSF4-22S WYMSF4-22L	22		25	30								
WYMSF4-30S WYMSF4-30L	30		29	34								
WYMSF4-37S WYMSF4-37L	37		325 (S) 425 (L)	454 (S) 454 (L)	228 (S) 250 (L)	431	160 (S) 250 (L)		8,5	8	31	36,5
WYMSF4-55S WYMSF4-55L	55										33	39
WYMSF4-75S WYMSF4-75L	75										47	51
WYMSF4-110S WYMSF4-110L	110										55	58
WYMSF4-132S WYMSF4-132L	132		63	67								
WYMSF4-160S WYMSF4-160L	160		430 (S) 500 (L)	509	250	480	300 (S) 120 (L)	360 (L)	11	8	-	-
WYMSF4-185S WYMSF4-185L	185										-	-
WYMSF4-220S WYMSF4-220L	220										-	-
WYMSF4-280S WYMSF4-280L	280										-	-
WYMSF4-300S WYMSF4-300L	300		460 (S) 540 (L)	560	275	531	300 (S) 140 (L)	420 (L)	11	8	-	-
WYMSF4-315S WYMSF4-315L	300	-									-	
WYMSF4-375S WYMSF4-375L	300	-									-	

*Model : "S" 100m 이내 Type "L" 300m 이내 type (Dimesion은 당사와 협의)

● Connection Diagram

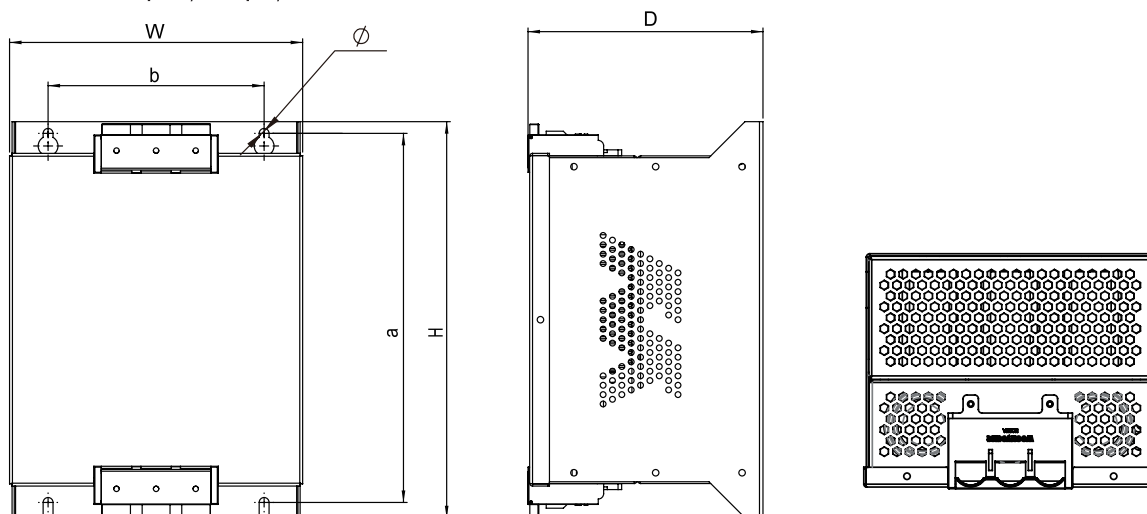


Micro Surge Filter (MSF)

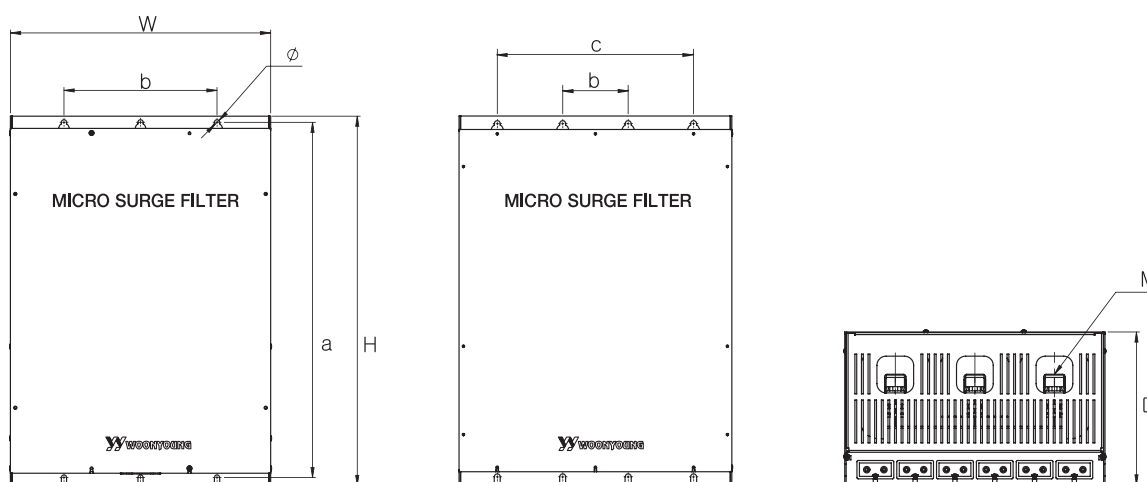
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● Dimension

– WYMSF4-0.75S/L~3.7S/L



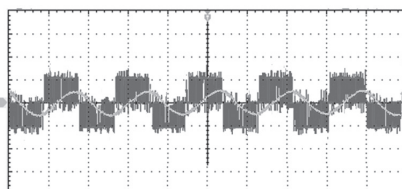
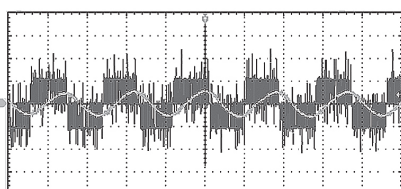
– WYMSF4-5.5S/L~375S/L



● Motor Output Waveform

Before

After



Block Diagram

