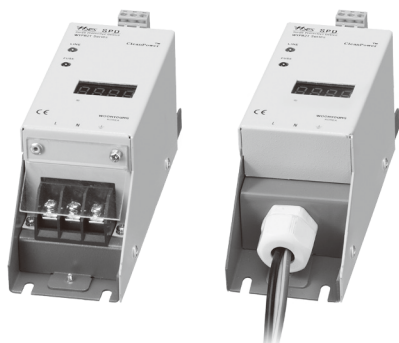
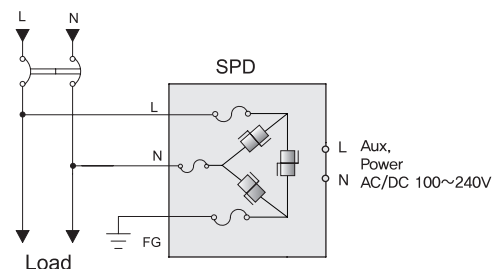


# Surge Protective Device (SPD)

단상접지 카운터형(1P2W) 220V Counter type 20/40kA series



## ● Connection



단상접지 (1phase earthed type)

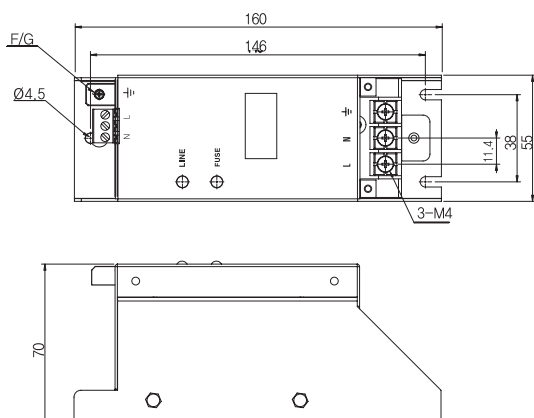
## ● Specification

Item	Model	WYPB2020T220C/L220C	WYPB2040T220C/L220C
Nominal voltage (Un)	Single phase 220VAC		
Aux, Power	AC/DC 100~240V		
Max. continuous operating voltage (Uc)	320VAC		
Voltage protection level (Up)	1.2kV@20kV/10kA (IEC61643-1)		
Rated frequency (Fo)	50/60Hz		
Max. discharge current (Imax)	20kA	40kA	
Nominal discharge current (In)	10kA	20kA	
Max. impulse current (Iimp)	-		
Protection level	Class II, III		
Protection mode	L-N, L-G, N-G		
Operating temperature range	-40~90°C		
Storage temperature range	-40~125°C		
Fuse	Thermal runaway fuse		
Connection type	T : Terminal type / L : Lead type		
Connection mode	Parallel connection type		
Wire size for connections	2.5mm <sup>2</sup>	4mm <sup>2</sup>	
Response time	< 25 nano second		
Indicator	Green	Power	
	Red	Fuse off	
Weight (kg)	0.7		

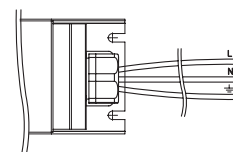
\* Model type  
T : Terminal Type  
L : Lead wire Type

## ● Dimension

- PB type -



<Lead type>

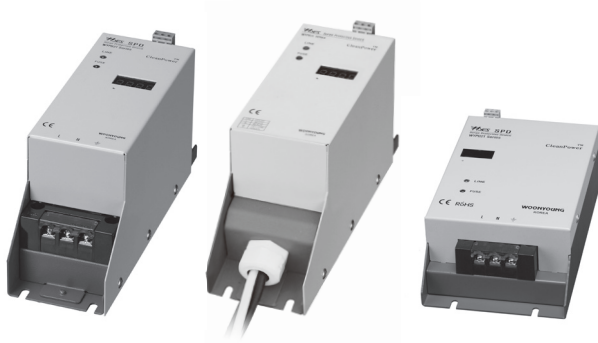


20kA-KIV insulation wire 2.5mm<sup>2</sup>  
40kA-KIV insulation wire 4mm<sup>2</sup>

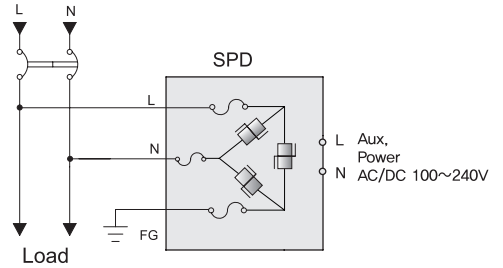
Line	Color	Lead
L	White	60cm
N	Black	60cm
⊥	Green/Yellow	1m

# Surge Protective Device (SPD)

단상접지 카운터형(1P2W) 220V Counter type 80/100/120kA series



## ● Connection



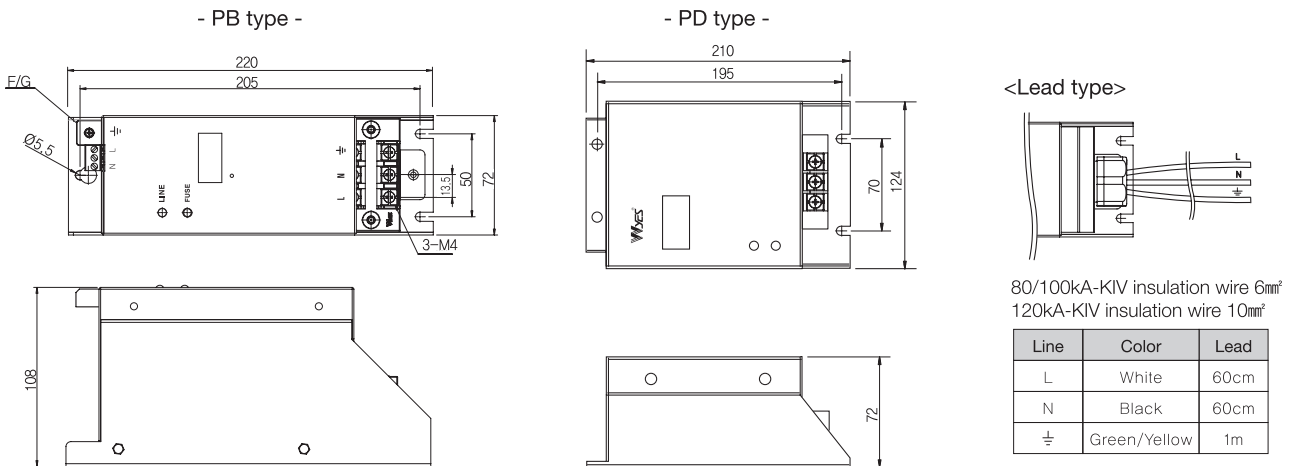
단상접지  
(1phase earthed type)

## ● Specification

Item	Model	WYPB2080T220C/L220C WYPD2080T220C/L220C	WYPB2100T220C/L220C WYPD2100T220C/L220C	WYPB2120T220C/L220C WYPD2120T220C/L220C
Nominal voltage (Un)		Single phase 220VAC		
Aux, Power		AC/DC 100~240V		
Max. continuous operating voltage (Uc)		320VAC		
Voltage protection level (Up)		(1,2kV@20kV/10kA (IEC61643-1))		
Rated frequency (Fo)		50/60Hz		
Max. discharge current (Imax)		80kA	100kA	120kA
Nominal discharge current (In)		40kA	50kA	60kA
Max. impulse current (Iimp)		-		
Protection level		Class II, III		
Protection mode		L-N, L-G, N-G		
Operating temperature range		-40~90°C		
Storage temperature range		-40~125°C		
Fuse		Thermal runaway fuse		
Connection type		T : Terminal type / L : Lead type		
Connection mode		Parallel connection type		
Wire size for connections		6mm <sup>2</sup>		10mm <sup>2</sup>
Response time		< 25 nano second		
Indicator	Green	Power		
	Red	Fuse off		
Weight (kg)		1,8		

\* Model type  
T : Terminal Type  
L : Lead wire Type

## ● Dimension



TRANS

NOISE

SSR

TPR

SMP

N/F

H/F

SPD

RELAY

ELD

GFR

ZCT

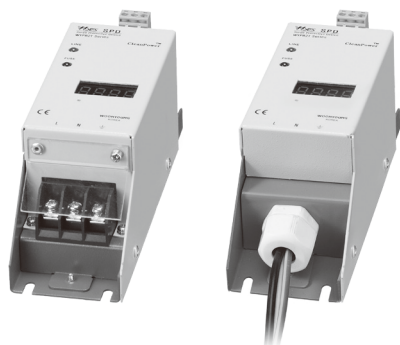
METER

CT/VT

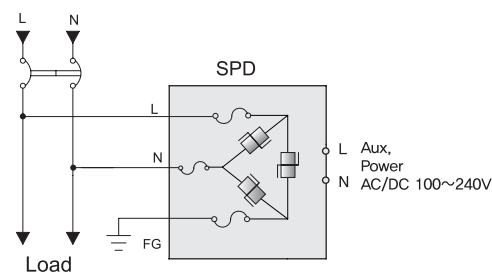
FAN

# Surge Protective Device (SPD)

단상접지 카운터형(1P2W) 380, 440V Counter type 20/40kA series



## ● Connection



단상접지  
(1phase earthed type)

## ● Specification

Item	Model	WYPB2020T380C/L380C	WYPB2040T380C/L380C
		WYPB2020T440C/L440C	WYPB2040T440C/L440C
Nominal voltage (Un)		Single phase 380, 440VAC	
Aux, Power		AC/DC 100~240V	
Max. continuous operating voltage (Uc)		460/625VAC	
Voltage protection level (Up)		1.2kV@20kV/10kA (IEC61643-1)	
Rated frequency (Fo)		50/60Hz	
Max. discharge current (Imax)		20kA	40kA
Nominal discharge current (In)		10kA	20kA
Max. impulse current (Iimp)		-	
Protection level		Class II, III	
Protection mode		L-N, L-G, N-G	
Operating temperature range		-40~90°C	
Storage temperature range		-40~125°C	
Fuse		Thermal runaway fuse	
Connection type		T : Terminal type / L : Lead type	
Connection mode		Parallel connection type	
Wire size for connections		2.5mm <sup>2</sup>	4mm <sup>2</sup>
Response time		< 25 nano second	
Indicator	Green	Power	
	Red	Fuse off	
Weight (kg)		0.7	

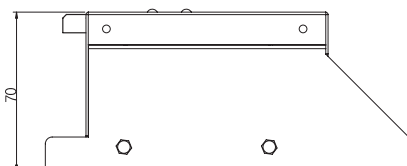
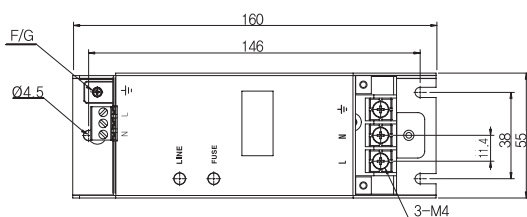
### \* Model type

T : Terminal Type

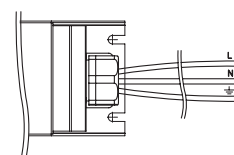
L : Lead wire Type

## ● Dimension

- PB type -



### <Lead type>



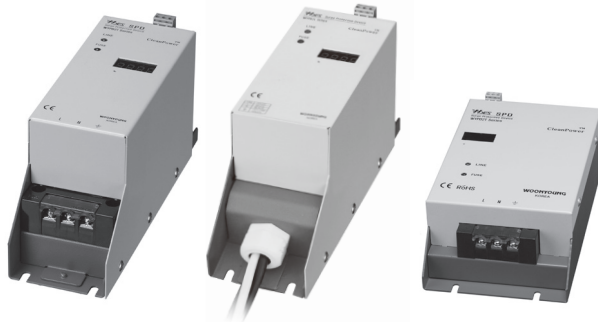
20kA-KIV insulation wire 2.5mm<sup>2</sup>  
40kA-KIV insulation wire 4mm<sup>2</sup>

Line	Color	Lead
L	White	60cm
N	Black	60cm
⊥	Green/Yellow	1m

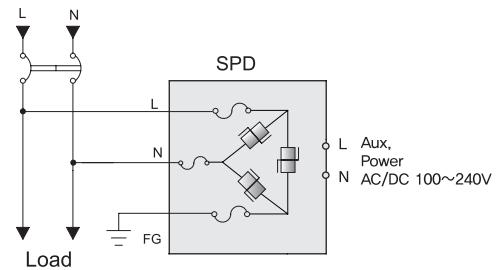
# Surge Protective Device (SPD)

서지 낙뢰 보호기

단상접지 카운터형(1P2W) 380, 440V Counter type 80/100/120kA series



### ● Connection



단상접지  
(1phase earthed type)

### ● Specification

Item	Model	WYPB2080T380C/L380C WYPB2080T440C/L440C	WYPB2100T380C/L380C WYPB2100T440C/L440C	WYPB2120T380C/L380C WYPB2120T440C/L440C
		WYPD2080T380C/L380C WYPD2080T440C/L440C	WYPD2100T380C/L380C WYPD2100T440C/L440C	WYPD2120T380C/L380C WYPD2120T440C/L440C
Nominal voltage (Un)	Single phase 380, 440VAC			
Aux, Power	AC/DC 100~240V			
Max. continuous operating voltage (Uc)	460/625VAC			
Voltage protection level (Up)	(1,2kV@20kV/10kA (IEC61643-1))			
Rated frequency (Fo)	50/60Hz			
Max. discharge current (Imax)	80kA	100kA	120kA	
Nominal discharge current (In)	40kA	50kA	60kA	
Max. impulse current (Iimp)	-			
Protection level	Class II, III			
Protection mode	L-N, L-G, N-G			
Operating temperature range	-40~90°C			
Storage temperature range	-40~125°C			
Fuse	Thermal runaway fuse			
Connection type	T : Terminal type / L : Lead type			
Connection mode	Parallel connection type			
Wire size for connections	6mm <sup>2</sup>		10mm <sup>2</sup>	
Response time	< 25 nano second			
Indicator	Green	Power		
	Red	Fuse off		
Weight (kg)	1,8			

\* Model type  
T : Terminal Type  
L : Lead wire Type

### ● Dimension

- PB type -

- PD type -

<Lead type>

80/100kA-KIV insulation wire 6mm<sup>2</sup>  
120kA-KIV insulation wire 10mm<sup>2</sup>

Line	Color	Lead
L	White	60cm
N	Black	60cm
⊕	Green/Yellow	1m

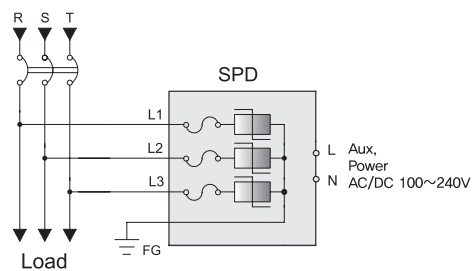
**T R A N S** 트랜스포머  
**N C T** 노이즈컷트레일스  
**S S R** 무단접점릴레이  
**T P R** 전력조정기  
**S M P S** 스위칭파워  
**N / F** 노이즈필터  
**H / F** 고조파필터  
**S P D** 서지보호기  
**R E L A Y** 보호계전기  
**E L D** 누전경보기  
**G F R** 지락계전기  
**Z C T** 영상변류기  
**M E T E R** 지시전기계기  
**C T / V T** 계기용변성기  
**F A N** 팬

# Surge Protective Device (SPD)

삼상접지 카운터형(3P3W) 220V Counter type 20/40kA series



### ● Connection



삼상접지  
(3phase earthed type)

### ● Specification

Item	Model	WYPB3020T220C WYPB3020L220C	WYPB3040T220C WYPB3040L220C
		WYPD3020T220C WYPD3020L220C	WYPD3040T220C WYPD3040L220C
Nominal voltage (Un)		Three phase 220VAC	
Aux. Power		AC/DC 100~240V	
Max. continuous operating voltage (Uc)		320VAC	
Voltage protection level (Up)		(2.1kV@20kV/10kA (IEC61643-1))	
Rated frequency (Fo)		50/60Hz	
Max. discharge current (Imax)		20kA	40kA
Nominal discharge current (In)		10kA	20kA
Max. impulse current (Iimp)		-	
Protection level		Class II, III	
Protection mode		L-L, L-G	
Operating temperature range		-40~90°C	
Storage temperature range		-40~125°C	
Fuse		Thermal runaway fuse	
Connection type		T : Terminal type / L : Lead type	
Connection mode		Parallel connection type	
Wire size for connections		2.5mm <sup>2</sup>	4mm <sup>2</sup>
Response time		< 25 nano second	
Indicator	Green	Power	
	Red	Fuse off	
Weight (kg)		1.1	

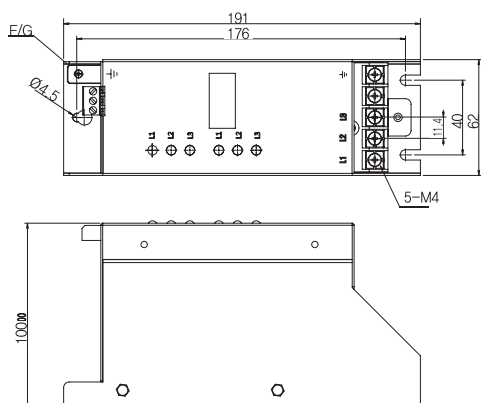
### \* Model type

T : Terminal Type

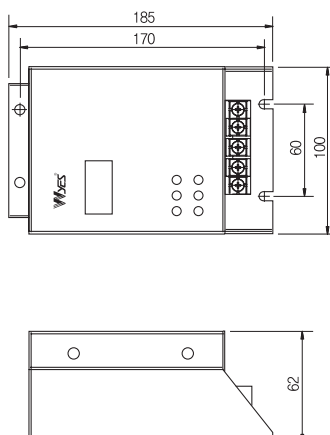
L : Lead wire Type

### ● Dimension

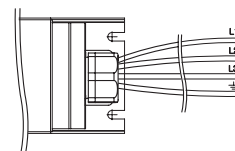
- PB type -



- PD type -



<Lead type>

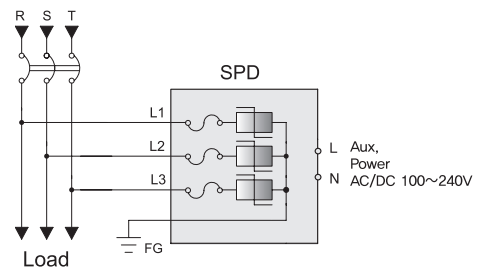


20kA-KIV insulation wire 2.5mm<sup>2</sup>  
40kA-KIV insulation wire mm<sup>2</sup>

Line	Color	Lead
L1	Red	60cm
L2	White	60cm
L3	Blue	60cm
⊥	Green/Yellow	1m



#### ● Connection



삼상접지  
(3phase earthed type)

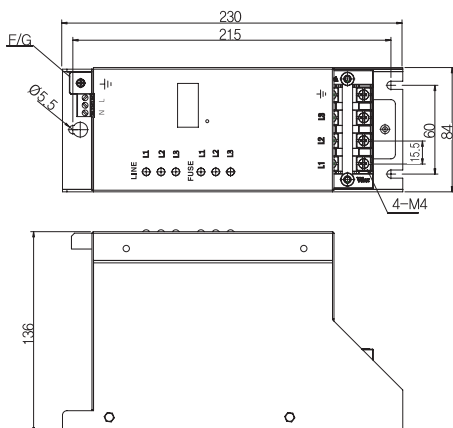
#### ● Specification

Item	Model	WYPB3080T220C	WYPB3100T220C	WYPB3120T220C	WYPB3160T220C	WYPB3200T220C	WYPB3240T220C
		WYPB3080L220C	WYPB3100L220C	WYPB3120L220C	WYPB3160L220C	WYPB3200L220C	WYPB3240L220C
Nominal voltage (Un)		Three phase 220VAC					
Aux, Power		AC/DC 100~240V					
Max. continuous operating voltage (Uc)		320VAC					
Voltage protection level (Up)		(2.1kV@20kV/10kA (IEC61643-1))					
Rated frequency (Fo)		50/60Hz					
Max. discharge current (Imax)		80kA	100kA	120kA	160kA	200kA	240kA
Nominal discharge current (In)		40kA	50kA	60kA	80kA	100kA	120kA
Max. impulse current (Iimp)		-				12,5kA	
Protection level		Class II, III				Class I, II, III	
Protection mode		L-L, L-G					
Operating temperature range		-40~90°C					
Storage temperature range		-40~125°C					
Fuse		Thermal runaway fuse					
Connection type		T : Terminal type / L : Lead type					
Connection mode		Parallel connection type					
Wire size for connections		6mm <sup>2</sup>			10mm <sup>2</sup>		
Response time		< 25 nano second					
Indicator	Green	Power					
	Red	Fuse off					
Weight (kg)		2,3					

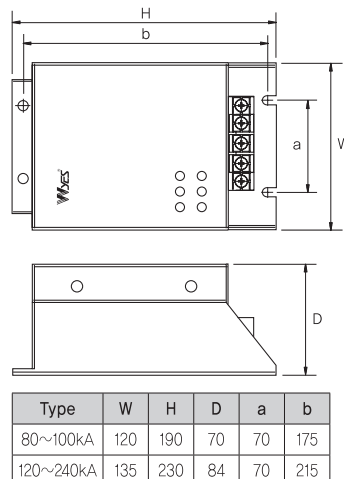
\* Model type  
T : Terminal Type  
L : Lead wire Type

#### ● Dimension

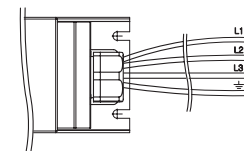
- PB type -



- PD type -



<Lead type>

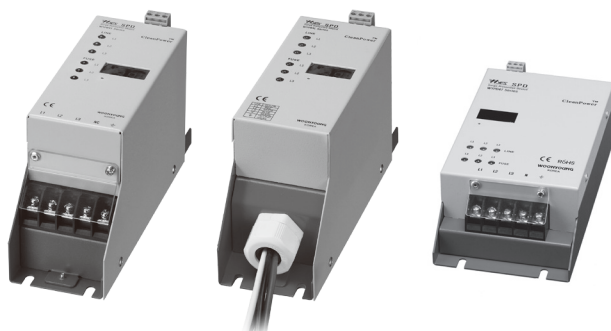


80/100kA-KIV insulation wire 6mm<sup>2</sup>  
120/160/200/240kA-KIV insulation wire 10mm<sup>2</sup>

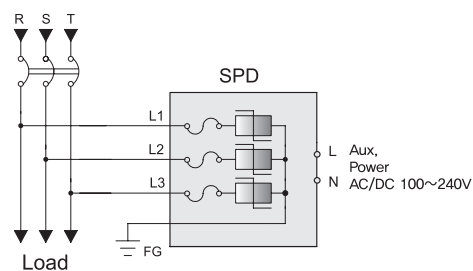
Line	Color	Lead
L1	Red	60cm
L2	White	60cm
L3	Blue	60cm
⊥	Green/Yellow	1m

# Surge Protective Device (SPD)

삼상접지 카운터형(3P3W) 380, 440V Counter type 20/40kA series



## ● Connection



삼상접지  
(3phase earthed type)

## ● Specification

Item	Model	WYPB3020T380C/L380C WYPB3020T440C/L440C	WYPB3040T380C/L380C WYPB3040T440C/L440C
		WYPD3020T380C/L380C WYPD3020T440C/L440C	WYPD3040T380C/L380C WYPD3040T440C/L440C
Nominal voltage (Un)	Three phase 380, 440VAC		
Aux, Power	AC/DC 100~240V		
Max. continuous operating voltage (Uc)	460/625VAC		
Voltage protection level (Up)	(2.1kV@20kV/10kA (IEC61643-1))		
Rated frequency (Fo)	50/60Hz		
Max. discharge current (Imax)	20kA	40kA	
Nominal discharge current (In)	10kA	20kA	
Max. impulse current (Iimp)	-		
Protection level	Class II, III		
Protection mode	L-L, L-G		
Operating temperature range	-40~90°C		
Storage temperature range	-40~125°C		
Fuse	Thermal runaway fuse		
Connection type	T : Terminal type / L : Lead type		
Connection mode	Parallel connection type		
Wire size for connections	2.5mm <sup>2</sup>	4mm <sup>2</sup>	
Response time	< 25 nano second		
Indicator	Green	Power	
	Red	Fuse off	
Weight (kg)	1.1		

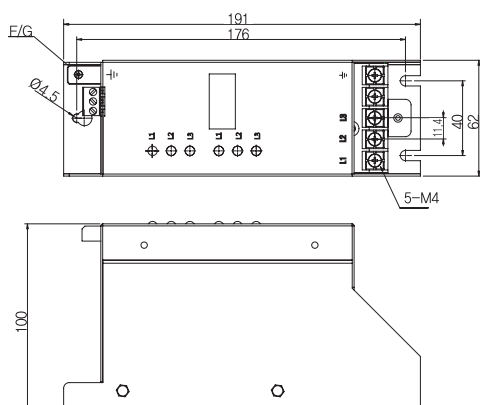
### \* Model type

T : Terminal Type

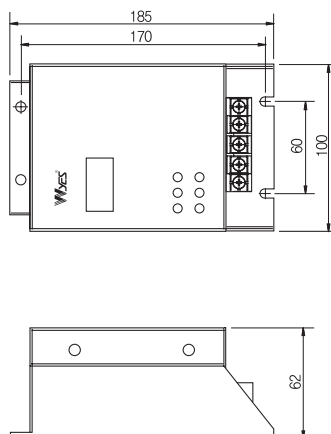
L : Lead wire Type

## ● Dimension

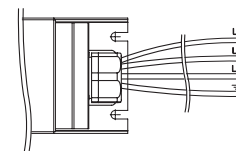
- PB type -



- PD type -



<Lead type>



20kA-KIV insulation wire 2.5mm<sup>2</sup>  
40kA-KIV insulation wire mm<sup>2</sup>

Line	Color	Lead
L1	Red	60cm
L2	White	60cm
L3	Blue	60cm
FG	Green/Yellow	1m

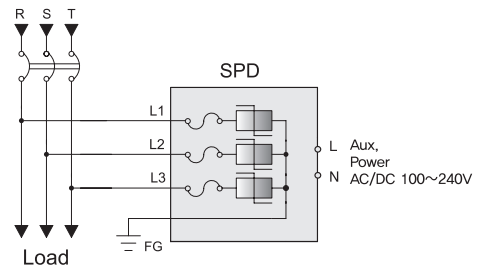
# Surge Protective Device (SPD)

서지 낙뢰 보호기

삼상접지 카운터형(3P3W) 380, 440V Counter type 80~240kA series



### ● Connection



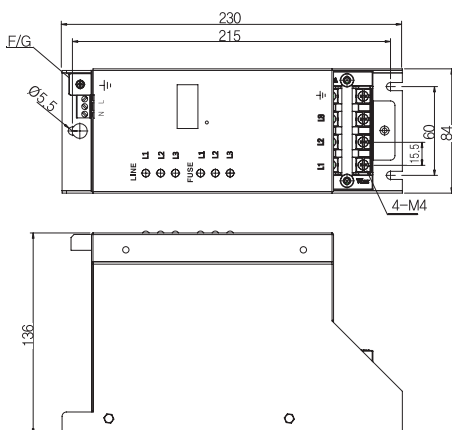
### ● Specification

Item	Model	WYPB3080T380C/L380C	WYPB3100T380C/L380C	WYPB3120T380C/L380C	WYPB3160T380C/L380C	WYPB3200T380C/L380C	WYPB3240T380C/L380C
		WYPB3080T440C/L440C	WYPB3100T440C/L440C	WYPB3120T440C/L440C	WYPB3160T440C/L440C	WYPB3200T440C/L440C	WYPB3240T440C/L440C
Nominal voltage (Un)	Three phase 380, 440VAC						
Aux, Power	AC/DC 100~240V						
Max. continuous operating voltage (Uc)	460/625VAC						
Voltage protection level (Up)	(2.1kV@20kV/10kA (IEC61643-1))						
Rated frequency (Fo)	50/60Hz						
Max. discharge current (Imax)	80kA	100kA	120kA	160kA	200kA	240kA	
Nominal discharge current (In)	40kA	50kA	60kA	80kA	100kA	120kA	
Max. impulse current (Iimp)	-					12.5kA	
Protection level	Class II, III					Class I, II, III	
Protection mode	L-L, L-G						
Operating temperature range	-40~90°C						
Storage temperature range	-40~125°C						
Fuse	Thermal runaway fuse						
Connection type	T : Terminal type / L : Lead type						
Connection mode	Parallel connection type						
Wire size for connections	6mm <sup>2</sup>			10mm <sup>2</sup>			
Response time	< 25 nano second						
Indicator	Green	Power					
	Red	Fuse off					
Weight (kg)	2,3						

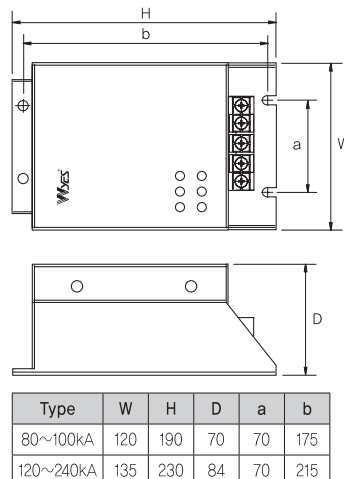
\* Model type  
T : Terminal Type  
L : Lead wire Type

### ● Dimension

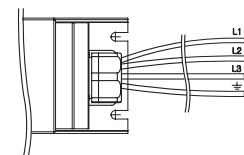
- PB type -



- PD type -



<Lead type>



80/100kA-KIV insulation wire 6mm<sup>2</sup>  
120/160/200/240kA-KIV insulation wire 10mm<sup>2</sup>

Line	Color	Lead
L1	Red	60cm
L2	White	60cm
L3	Blue	60cm
FG	Green/Yellow	1m

트랜스포머

노이즈컷트랜스

무선접점릴레이

전력조정기

스위칭파워

노이즈필터

고조파필터

서지보호기

보호계전기

누전경보기

지락계전기

영상변류기

지시전기계기

계기용변성기

FAN

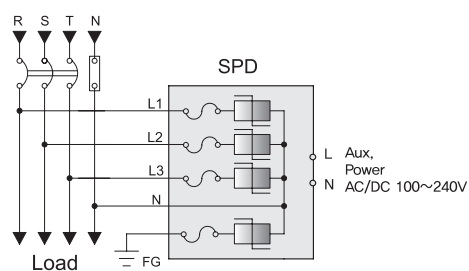


# Surge Protective Device (SPD)

삼상N접지 카운터형(3P4W) 380/220V N-earthed counter type 20/40kA series



## ● Connection



삼상N접지  
(3phase N-earthed type)

## ● Specification

Item	Model	WYPB4020T380C WYPB4020L380C	WYPB4040T380C WYPB4040L380C
		WYPD4020T380C WYPD4020L380C	WYPD4040T380C WYPD4040L380C
Nominal voltage (Un)		Three phase 380/220VAC	
Aux, Power		AC/DC 100~240V	
Max. continuous operating voltage (Uc)		320/640VAC	
Voltage protection level (Up)	L-N, N-G	(1,2kV@20kV/10kA (IEC61643-1))	
	L-L, L-G	(2,1kV@20kV/10kA (IEC61643-1))	
Rated frequency (Fo)		50/60Hz	
Max. discharge current (Imax)		20kA	40kA
Nominal discharge current (In)		10kA	20kA
Max. impulse current (Iimp)		-	
Protection level		Class II, III	
Protection mode		L-N, N-G, L-L, L-G	
Operating temperature range		-40~90°C	
Storage temperature range		-40~125°C	
Fuse		Thermal runaway fuse	
Connection type		T : Terminal type / L : Lead type	
Connection mode		Parallel connection type	
Wire size for connections		2,5mm <sup>2</sup>	4mm <sup>2</sup>
Response time		< 25 nano second	
Indicator	Green	Power	
	Red	Fuse off	
Weight (kg)		1,1	

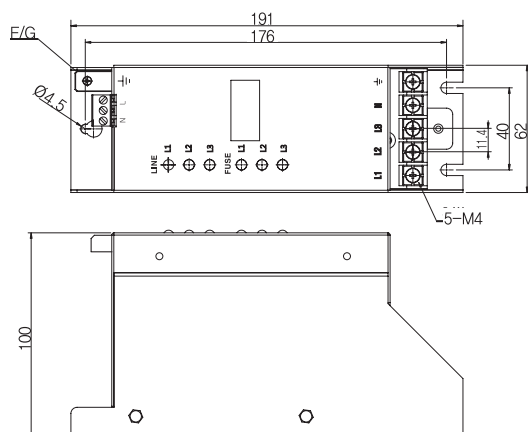
### \* Model type

T : Terminal Type

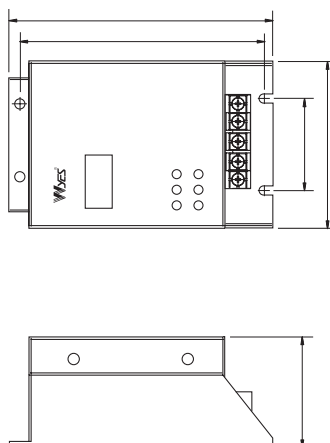
L : Lead wire Type

## ● Dimension

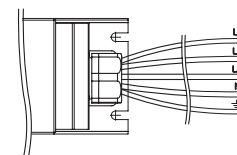
- PB type -



- PD type -



<Lead type>

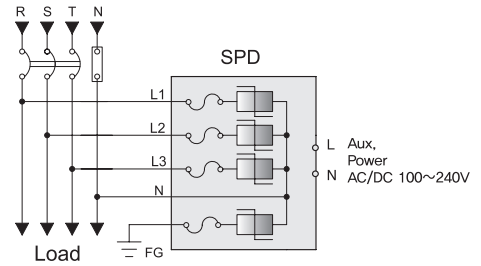


20kA-KIV insulation wire 2.5mm<sup>2</sup>  
40kA-KIV insulation wire 4mm<sup>2</sup>

Line	Color	Color
L1	Red	60cm
L2	White	60cm
L3	Blue	60cm
N	Black	60cm
FG	Green/Yellow	1m



#### ● Connection



삼상N접지  
(3Phase N-earthed type)

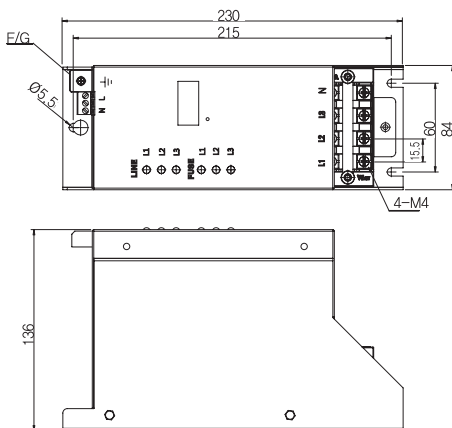
#### ● Specification

Item	Model					
	WYPB4080T380C WYPB4080L380C WYPD4080T380C WYPD4080L380C	WYPB4100T380C WYPB4100L380C WYPD4100T380C WYPD4100L380C	WYPB4120T380C WYPB4120L380C WYPD4120T380C WYPD4120L380C	WYPB4160T380C WYPB4160L380C WYPD4160T380C WYPD4160L380C	WYPB4200T380C WYPB4200L380C WYPD4200T380C WYPD4200L380C	WYPB4240T380C WYPB4240L380C WYPD4240T380C WYPD4240L380C
Nominal voltage (Un)	Three phase 380/220VAC					
Aux, Power	AC/DC 100~240V					
Max. continuous operating voltage (Uc)	320/640VAC					
Voltage protection level (Up)	L-N, N-G	(1.2kV@20kV/10kA (IEC61643-1))				
	L-L, L-G	(2.1kV@20kV/10kA (IEC61643-1))				
Rated frequency (Fo)	50/60Hz					
Max. discharge current (Imax)	80kA	100kA	120kA	160kA	200kA	240kA
Nominal discharge current (In)	40kA	50kA	60kA	80kA	100kA	120kA
Max. impulse current (Iimp)	-				12.5kA	
Protection level	Class II, III				Class I, II, III	
Protection mode	L-N, N-G, L-L, L-G					
Operating temperature range	-40~90°C					
Storage temperature range	-40~125°C					
Fuse	Thermal runaway fuse					
Connection type	T : Terminal type / L : Lead type					
Connection mode	Parallel connection type					
Wire size for connections	6mm <sup>2</sup>			10mm <sup>2</sup>		
Response time	< 25 nano second					
Indicator	Green	Power				
	Red	Fuse off				
Weight (kg)						

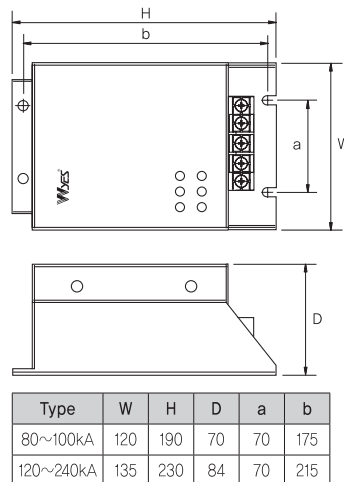
\* Model type  
T : Terminal Type  
L : Lead wire Type

#### ● Dimension

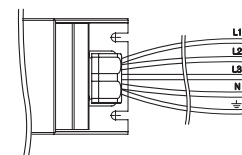
- PB type -



- PD type -



<Lead type>



80/100kA-KIV insulation wire 6mm<sup>2</sup>  
120/160/200/240kA-KIV insulation wire 10mm<sup>2</sup>

Line	Color	Color
L1	Red	60cm
L2	White	60cm
L3	Blue	60cm
N	Black	60cm
⏚	Green/Yellow	1m