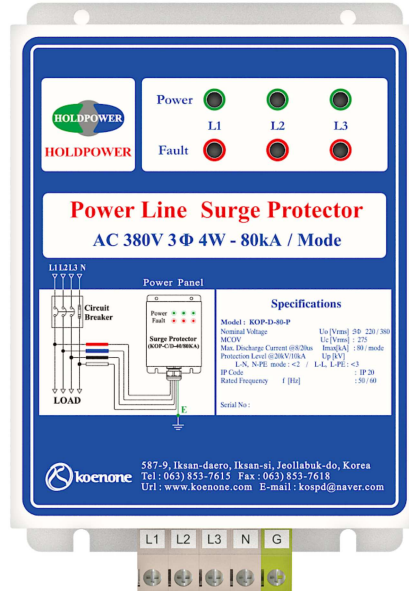


# SPD Normal type



## Power Line Normal-Type SPD



### Specification

### Product Features

<b>Voltage</b>	AC 460V / 440V / 380V / 220V / 110V DC 600V / 440V / 380V / 200V	<p>CE-certified product</p> <p>High-performance, High-capacity SPD [40kA - mode / 80kA - mode]</p> <p>Full mode protection [Line-Neutral, Line-Ground, Line-Line] - &lt;For Class II, III&gt;</p> <p>Performance in compliance with KS C IEC standard</p> <p>Dual safety design [Current &amp; Thermal fuse]</p> <p>Lamp and buzzer for normal or abnormal state check</p> <p>Steel case for proven safety against surge protector failure</p>
<b>Type</b>	3-Phase 4-Wire/3-Phase 3-Wire/ Single-Phase 2-Wire (Parallel)	
<b>Capacity</b>	40kA - mode / 80kA - mode	

### Application

Distribution ACB 2nd Panel, Distribution 1st Panel, Distribution 2nd Panel, UPS input-output, Instrument power [Flowmeter, Water gauge, Electronic scale etc.], Actuator power, Other device power.

# SPD Class II, III



## Class II, III Surge Protector

<b>SPD Class</b>	<b>Class II, III Surge Protector (Class II, III SPD)</b>
<b>Model</b>	<b>KOP-D-40P [3-Phase 4-Wire, Parallel]</b>
<b>Application</b>	[*LPZ2, *LPZ3] Power and earthing line lightning, Switching surge protection
<b>Application Field</b>	Incoming panel, Distribution board, 3-phase UPS, Inverter, Motor driver, Actuator, and other 3 phase power devices



### Electrical property

Rated voltage	Un	380~460V AC [Ph-Ph], 220~260V AC [Ph-N]
Rated current		N/A
Power system configuration		3-Phase 4-Wire, Parallel connection
Max Continuous Operating Voltage (MCOV)	Uc	275V AC [L-N], 275V AC [N-PE]
Rated frequency	f	50 / 60 Hz
Leakage current (@Uc)	IL	Less than 1 mA
Insulation resistance (@500V DC)	RIN	Above 10 MΩ

### Protection property

Protection mode		L1-N	L2-N	L3-N	N-G
<b>Voltage protection level [CE Class 2 test]</b> (In 20kA @ 8/20μs) - IEC 61643-11	Up	≤ 2,500V	≤ 2,500V	≤ 2,500V	≤ 1,500V
<b>Max current capacity</b> 40kA Mode (@Current 8/20μs) [Total : 160kA]		40kA	40kA	40kA	40kA
<b>Nominal discharge current</b> (@Current 8/20μs)	In	20kA	20kA	20kA	20kA
<b>Response time (@10kV/μs)</b>	ta	Less than 5 ns			

### Features

<b>Operation status</b>	Run = green lamp / Fault = red lamp [L1-N, L2-N, L3-N]
<b>Safety</b>	Dual safety design [current & thermal fuse]

### Mechanical property

<b>Protection rating level</b>	IP20 (@IEC 60529), NEMA1
<b>Operating temperature and humidity</b>	-40~ 90°C, ≤ 95%
<b>Terminal</b>	76A IEC type [Awg 6~24 / 0.5~10mm]
<b>Size</b>	(W)113 x (L)171 x (H)80 mm cf. p40 D-1
<b>Installation</b>	Bolt mounting
<b>Weight</b>	Less than 1.5kg

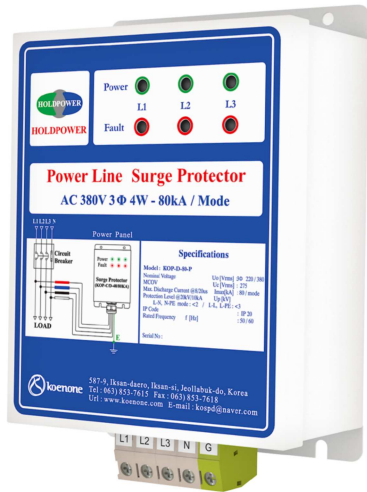
### Test standard & Reference

IEC 61643-11 [2017] Performance and Test Criteria for Power Line Surge Protector
IEC 61643-12 [2017] Lightning Protection Zone 1,2,3
IEC 62305-1,2,3,4 [2017]
ANSI/IEEE Std C62.45 [2002] Guide to Surge Test for Low-pressure Device
ANSI/IEEE Std C62.41 [2002] Category A, B, C
IEEE Std C62.34 [2017] Power line surge protector performance standard
IEEE Std C62.62 [2018] Power line surge protector standard test specification

\*LPZ : Lightning Protection Zone(lightning protection area)

## Size

# Power Line Class II, III SPD Normal Type



**Model List D-1**  
(W)113 x (L)171 x (H)80

### Single-phase

- KOP-C-40P
- KOP-C-80P

### 3-phase

- KOP-D-40P

**Model List D-2**  
(W)130 x (L)200 x (H)80

### 3-phase

- KOP-D-80P

[Unit : mm]

