

KS4400 Series



The KS4400 series is simple, modular and flexible yet highly functional. The half shell design is cost effective and provides exceptional space utilization. Three levels of terminals with fixed and pluggable PCB terminal options allow for high density connections. A large front face area provides ample space for operator, communication and visual display components.

MATERIALS

Housing

Housing Shell: Polyamide, Glass Filled; Front Plate: PBT

Terminals

Housing: Polyamide; Terminal Pins: Tinned Brass

Temperature Rating: 120°C (248°F) UL94 V-0¹

Standard Color: Black Housing with Gray Front Plate

Other colors are available upon request.

PROTECTION

KS4400 enclosures have an IP40 rating, IP20 for terminal openings (finger protected) and meet VBG4 and other European accident prevention requirements.

CONSTRUCTION

The KS4400 enclosure series housings are supplied as unassembled kits. Each kit consists of two half shells, a front plate, DIN rail clip and terminal sets. The terminals are set on three levels to maximize space. The terminals are machine solderable with right angle pins. PC boards are mounted vertically in the enclosure, perpendicular to the DIN rail.

TERMINALS

The terminals are available as fixed or pluggable PCB terminals. The terminal blocks are all machine solderable. Fixed PCB terminals are standard screw cage clamp style terminal blocks.

Pluggable PCB terminals feature male pin headers and female screw cage clamp or spring cage clamp plugs that can be plugged/unplugged. Terminal spaces can also be left blank and covered with a snap in cover (terminal blanking plug).

MOUNTING

The KS4400 series can easily be mounted on standard 35mm DIN rail by means of the integral mounting foot and DIN clip.

MARKING

The KS4400 series have large marking areas on the front of the cover.

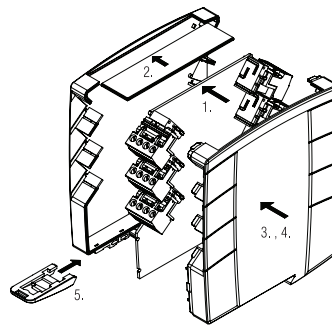
CUSTOMIZATION

We can supply the KS4400 series enclosures with many custom options including:

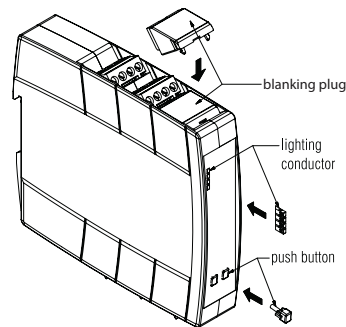
- Partial or mixed terminal loading
- Printing/Marking
- Enclosure bus connections
- Ventilation Slots
- Machining of custom holes
- Hinged front covers
- Front cover with test buttons

ASSEMBLY OF ENCLOSURE

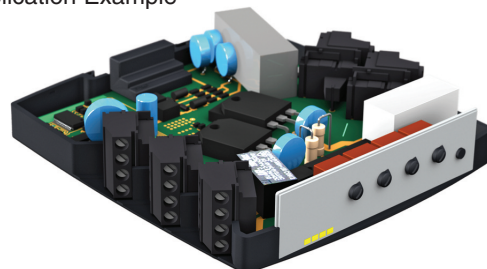
- 1 With terminals fitted, place the PCB in the first enclosure half shell.
- 2 Slide the front plate in the slot in the first enclosure half shell.
- 3 Place this assembly flat and line-up the second half shell so that the front plate slides into the slot.
- 4 Manually close both half shells until they snap together.
- 5 Insert the DIN rail mounting clip into the base of the enclosure.



ACCESSORIES AND OPTIONS



Application Example



¹On request.

8 Terminal Screw Terminals



TECHNICAL INFORMATION

Electrical:
10A, 300V, 20-14AWG

Materials:
Housing - PA
Hinged Front Plate - PC

Temperature Range:
Up to 105°C (221°F)

Flammability Rating:
UL94 V-0¹
UL94 V-2 Front Plate

***Color:** Black Housing
Transparent Cover Plate

Terminal Type:
Screw

Terminal Screw Size: M3.5

Recommended Torque:
0.6Nm

Max. PCB's:
(1) Vertical

Mounting:
35mm DIN Rail

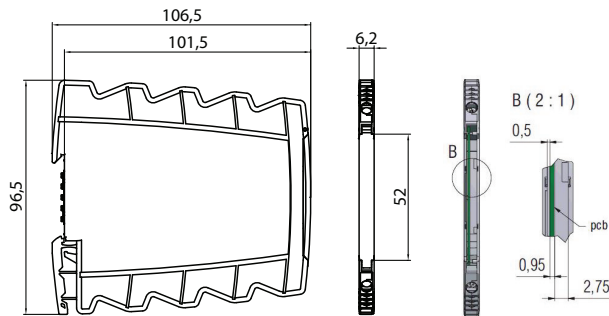
ORDERING INFORMATION

Part Number	Type	Terminals	PCB Connection
90.110	KS4460	Screw	Solder Pin

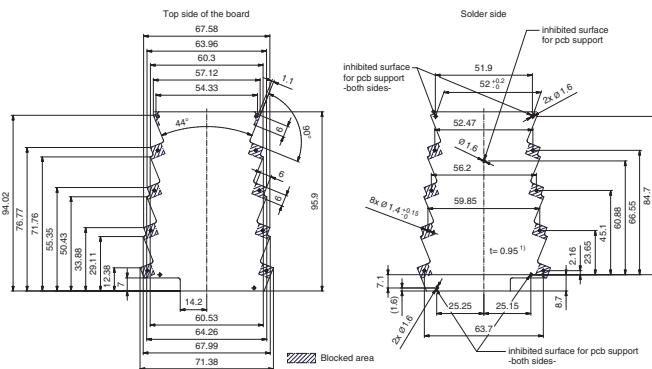
ACCESSORIES

Accessories	Part Number	Type
1 Meter DIN Rail	2511120/1M	TS35x7.5/1M
Light Pipes, 3mm Grid	90.191	KS4400-7-1
Light Pipes, 5mm Grid	90.192	KS4400-6-1

ENCLOSURE DRAWING (To convert to inches divide by 25.4.)



PCB DRAWING (To convert to inches divide by 25.4.)



*Other colors are available upon request. ¹On request.

8 Terminal Spring Terminals



TECHNICAL INFORMATION

Electrical:
10A, 300V, 20-14AWG

Materials:
Housing - PA
Hinged Front Plate - PC

Temperature Range:
Up to 105°C (221°F)

Flammability Rating:
UL94 V-0¹
UL94 V-2 Front Plate

***Color:** Black Housing
Transparent Cover Plate

Terminal Type:
Spring

Terminal Screw Size: –

Recommended Torque: –

Max. PCB's:
(1) Vertical

Mounting:
35mm DIN Rail

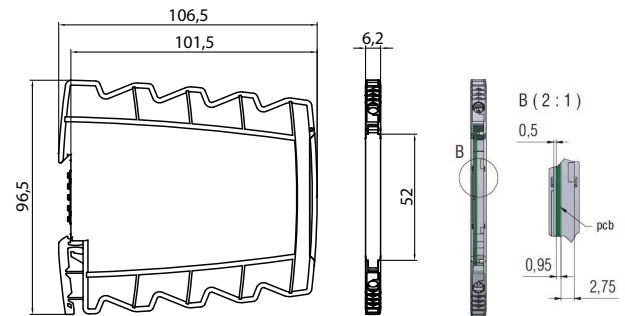
ORDERING INFORMATION

Part Number	Type	Terminals	PCB Connection
90.115	KS4460	Spring	Solder Pin

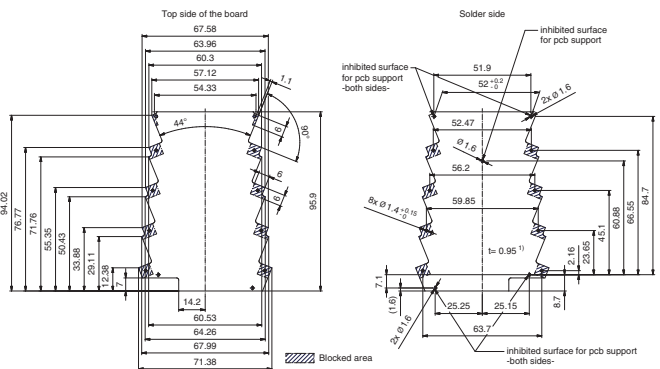
ACCESSORIES

Accessories	Part Number	Type
1 Meter DIN Rail	2511120/1M	TS35x7.5/1M
Light Pipes, 3mm Grid	90.191	KS4400-7-1
Light Pipes, 5mm Grid	90.192	KS4400-6-1

ENCLOSURE DRAWING (To convert to inches divide by 25.4.)



PCB DRAWING (To convert to inches divide by 25.4.)



12 Terminal Fixed Terminals



TECHNICAL INFORMATION

Electrical:
10A, 300V, 22-14AWG

Materials:
Housing - PA-GF
Front Plate - PBT
Terminals - PA

Temperature Range:
Up to 120°C (248°F)

Flammability Rating:
UL94 V-0¹

***Color:** Black Housing
Gray Cover Plate

Terminal Type:
Fixed Screw

Terminal Screw Size: M2.5

Recommended Torque:
0.5Nm

Max. PCB's:
(1) Vertical

Mounting:
35mm DIN Rail

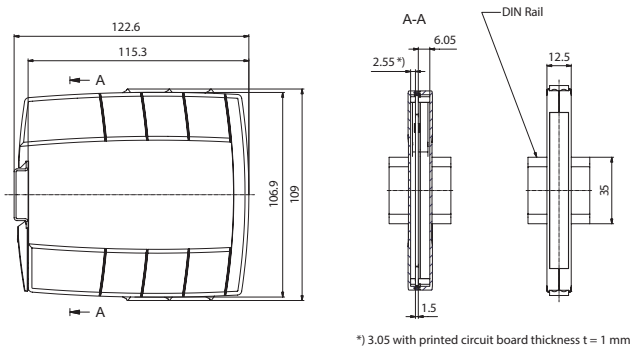
ORDERING INFORMATION

Part Number	Type	Terminals	PCB Connection
90.120	KS4401/F	Fixed Screw	Machine Solder

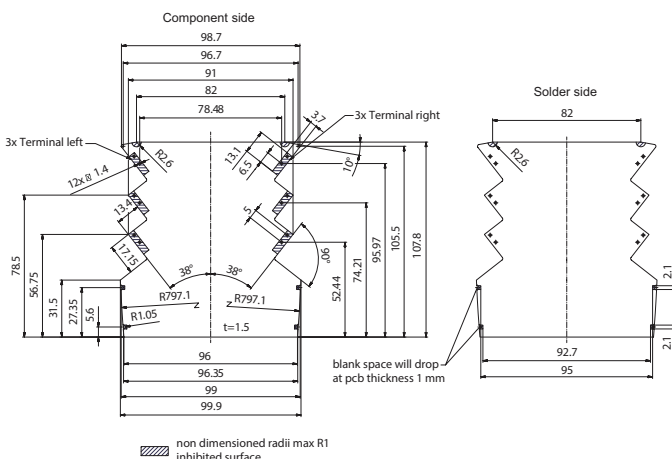
ACCESSORIES

Accessories	Part Number	Type
1 Meter DIN Rail	2511120/1M	TS35x7.5/1M
Terminal Blanking Plug	90.190	KS4403-5-1
Light Pipes, 3mm Grid	90.191	KS4400-7-1
Light Pipes, 5mm Grid	90.192	KS4400-6-1

ENCLOSURE DRAWING (To convert to inches divide by 25.4.)



PCB DRAWING (To convert to inches divide by 25.4.)



*Other colors are available upon request. ¹On request.

12 Terminal Pluggable Terminals



TECHNICAL INFORMATION

Electrical:
10A, 300V, 30-12AWG (Screw);
10A, 300V, 26-12AWG (Spring)

Materials:
Housing - PA-GF
Front Plate - PBT
Terminals - PA

Temperature Range:
Up to 120°C (248°F)

Flammability Rating:
UL94 V-0¹

***Color:** Black Housing
Gray Cover Plate

Terminal Type:
Pluggable Screw /
Pluggable Spring

Terminal Screw Size: M2.5

Recommended Torque:
0.5Nm

Max. PCB's:
(1) Vertical

Mounting:
35mm DIN Rail

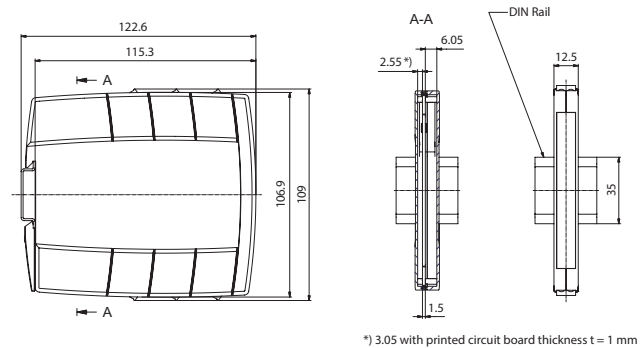
ORDERING INFORMATION

Part Number	Type	Terminals	PCB Connection
90.121	KS4401/PS	Pluggable Screw	Machine Solder
90.122	KS4401/PC	Pluggable Spring	Machine Solder

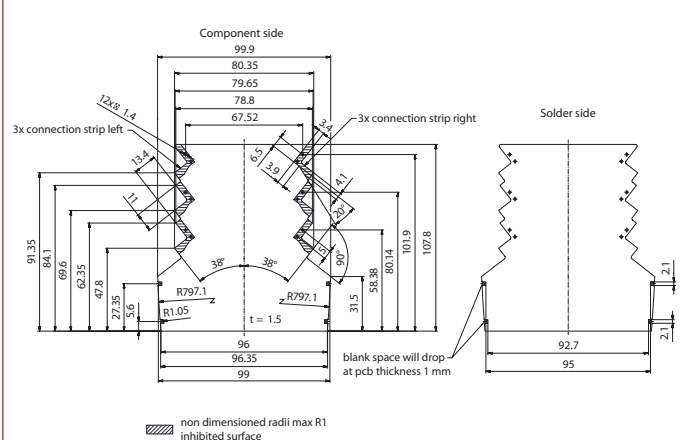
ACCESSORIES

Accessories	Part Number	Type
1 Meter DIN Rail	2511120/1M	TS35x7.5/1M
Terminal Blanking Plug	90.190	KS4403-5-1
Light Pipes, 3mm Grid	90.191	KS4400-7-1
Light Pipes, 5mm Grid	90.192	KS4400-6-1

ENCLOSURE DRAWING (To convert to inches divide by 25.4.)



PCB DRAWING (To convert to inches divide by 25.4.)



KS4400 Enclosure Series

18 Terminal Fixed Terminals



TECHNICAL INFORMATION

Electrical:
10A, 300V, 22-14AWG

Materials:
Housing - PA-GF
Front Plate - PBT
Terminals - PA

Temperature Range:
Up to 120°C (248°F)

Flammability Rating:
UL94 V-0¹

***Color:** Black Housing
Gray Cover Plate

Terminal Type:
Fixed Screw

Terminal Screw Size: M2.5

Recommended Torque:
0.5Nm

Max. PCB's:
(1) Vertical

Mounting:
35mm DIN Rail

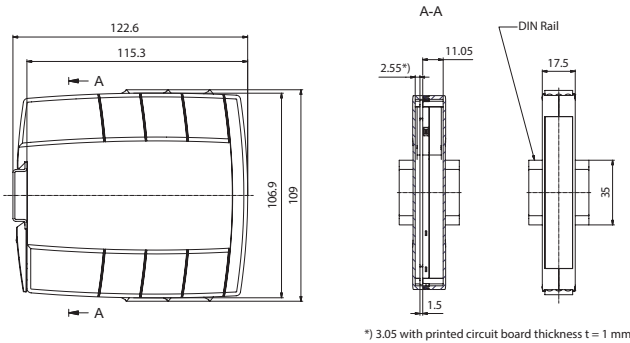
ORDERING INFORMATION

Part Number	Type	Terminals	PCB Connection
90.130	KS4402/F	Fixed Screw	Machine Solder

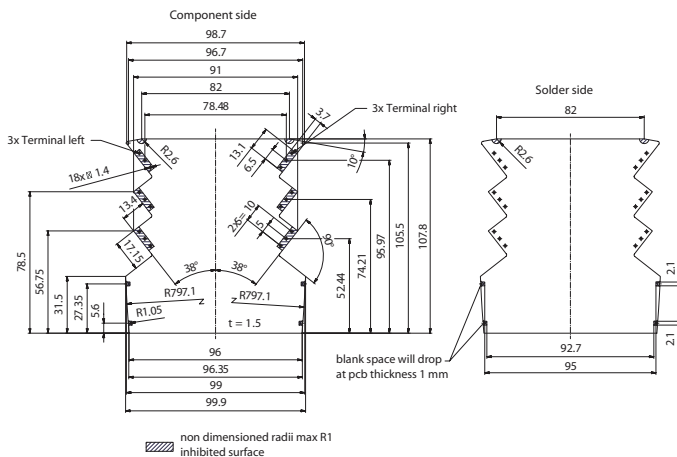
ACCESSORIES

Accessories	Part Number	Type
1 Meter DIN Rail	2511120/1M	TS35x7.5/1M
Terminal Blanking Plug	90.190	KS4403-5-1
Light Pipes, 3mm Grid	90.191	KS4400-7-1
Light Pipes, 5mm Grid	90.192	KS4400-6-1

ENCLOSURE DRAWING (To convert to inches divide by 25.4.)



PCB DRAWING (To convert to inches divide by 25.4.)



*Other colors are available upon request. ¹On request.

18 Terminal Pluggable Terminals



TECHNICAL INFORMATION

Electrical:
10A, 300V, 30-12AWG (Screw);
10A, 300V, 26-12AWG (Spring)

Materials:
Housing - PA-GF
Front Plate - PBT
Terminals - PA

Temperature Range:
Up to 120°C (248°F)

Flammability Rating:
UL94 V-0¹

***Color:** Black Housing
Gray Cover Plate

Terminal Type:
Pluggable Screw /
Pluggable Spring

Terminal Screw Size: M2.5

Recommended Torque:
0.5Nm

Max. PCB's:
(1) Vertical

Mounting:
35mm DIN Rail

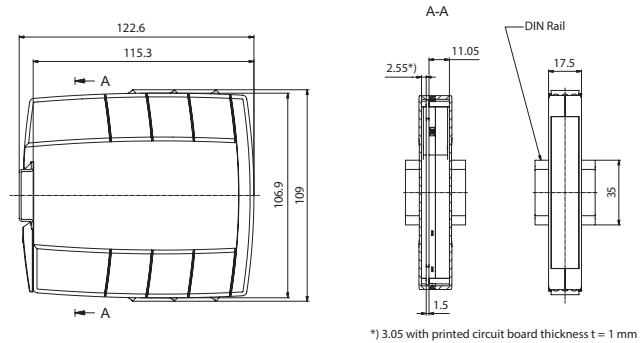
ORDERING INFORMATION

Part Number	Type	Terminals	PCB Connection
90.131	KS4402/PS	Pluggable Screw	Machine Solder
90.132	KS4402/PC	Pluggable Spring	Machine Solder

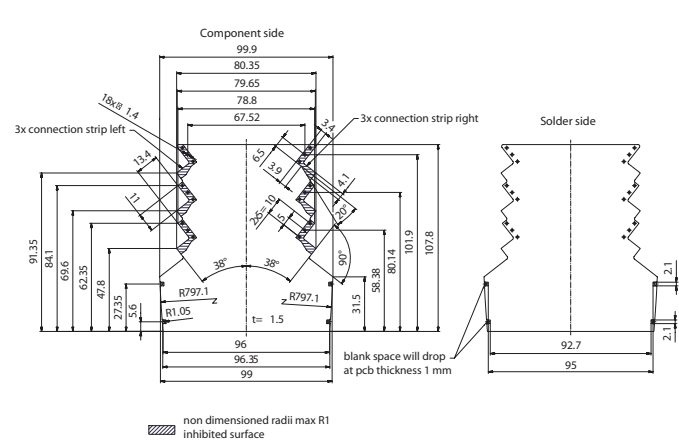
ACCESSORIES

Accessories	Part Number	Type
1 Meter DIN Rail	2511120/1M	TS35x7.5/1M
Terminal Blanking Plug	90.190	KS4403-5-1
Light Pipes, 3mm Grid	90.191	KS4400-7-1
Light Pipes, 5mm Grid	90.192	KS4400-6-1

ENCLOSURE DRAWING (To convert to inches divide by 25.4.)

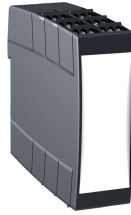


PCB DRAWING (To convert to inches divide by 25.4.)



KS4400 Enclosure Series

36 Terminal Fixed Terminals



TECHNICAL INFORMATION

Electrical:
10A, 300V, 22-14AWG

Materials:
Housing - PA-GF
Front Plate - PBT
Terminals - PA

Temperature Range:
Up to 120°C (248°F)

Flammability Rating:
UL94 V-0¹

***Color:** Black Housing
Gray Cover Plate

Terminal Type:
Fixed Screw

Terminal Screw Size: M2.5

Recommended Torque:
0.5Nm

Max. PCB's:
(2) Vertical

Mounting:
35mm DIN Rail

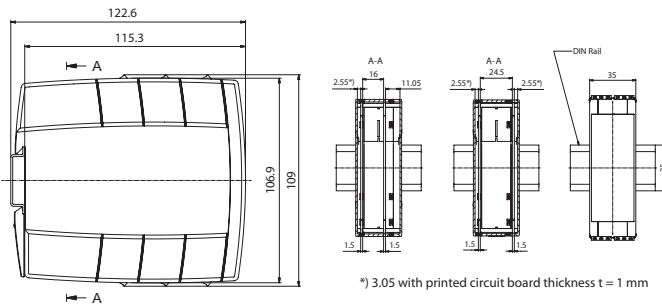
ORDERING INFORMATION

Part Number	Type	Terminals	PCB Connection
90.150	KS4461/F	Fixed Screw	Machine Solder

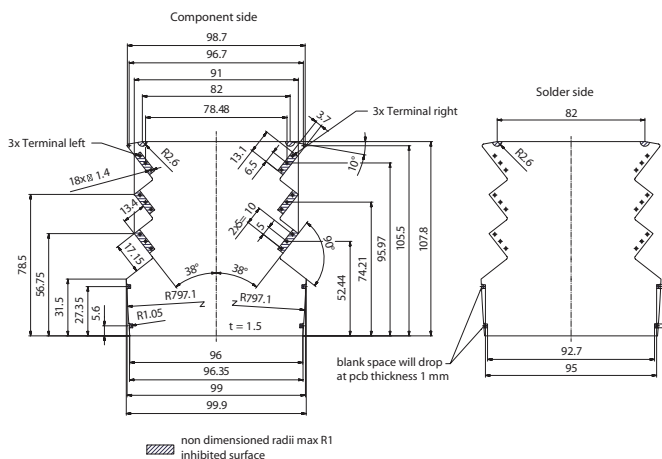
ACCESSORIES

Accessories	Part Number	Type
1 Meter DIN Rail	2511120/1M	TS35x7.5/1M
Terminal Blanking Plug	90.190	KS4403-5-1
Light Pipes, 3mm Grid	90.191	KS4400-7-1
Light Pipes, 5mm Grid	90.192	KS4400-6-1

ENCLOSURE DRAWING (To convert to inches divide by 25.4.)

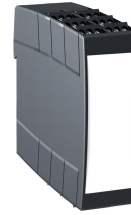


PCB DRAWING (To convert to inches divide by 25.4.)



*Other colors are available upon request. ¹On request.

36 Terminal Pluggable Terminals



TECHNICAL INFORMATION

Electrical:
10A, 300V, 30-12AWG (Screw);
10A, 300V, 26-12AWG (Spring)

Materials:
Housing - PA-GF
Front Plate - PBT
Terminals - PA

Temperature Range:
Up to 120°C (248°F)

Flammability Rating:
UL94 V-0¹

***Color:** Black Housing
Gray Cover Plate

Terminal Type:
Pluggable Screw /
Pluggable Spring

Terminal Screw Size: M2.5

Recommended Torque:
0.5Nm

Max. PCB's:
(2) Vertical

Mounting:
35mm DIN Rail

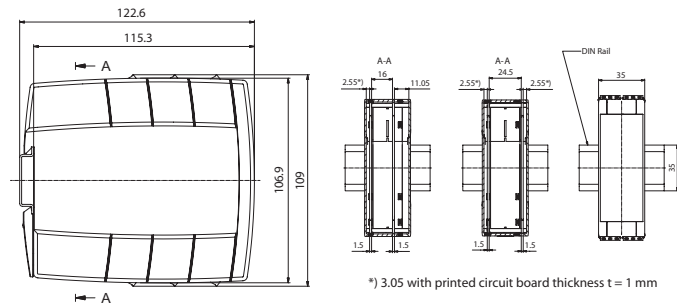
ORDERING INFORMATION

Part Number	Type	Terminals	PCB Connection
90.151	KS4461/PS	Pluggable Screw	Machine Solder
90.152	KS4461/PC	Pluggable Spring	Machine Solder

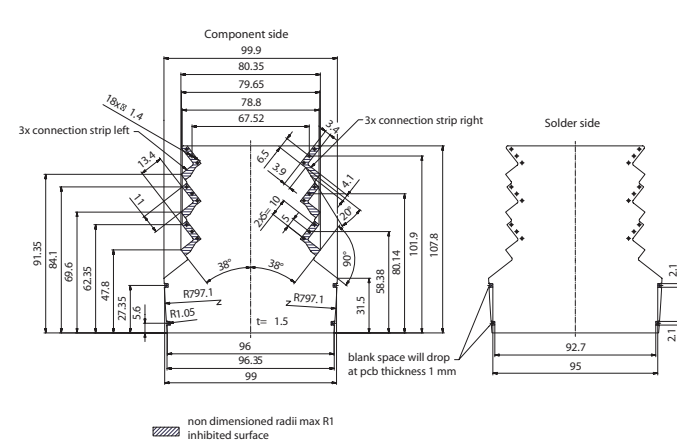
ACCESSORIES

Accessories	Part Number	Type
1 Meter DIN Rail	2511120/1M	TS35x7.5/1M
Terminal Blanking Plug	90.190	KS4403-5-1
Light Pipes, 3mm Grid	90.191	KS4400-7-1
Light Pipes, 5mm Grid	90.192	KS4400-6-1

ENCLOSURE DRAWING (To convert to inches divide by 25.4.)



PCB DRAWING (To convert to inches divide by 25.4.)



**48 Terminal
Fixed Terminals**



TECHNICAL INFORMATION

Electrical:
10A, 300V, 22-14AWG

Materials:
Housing - PA-GF
Front Plate - PBT
Terminals - PA

Temperature Range:
Up to 120°C (248°F)

Flammability Rating:
UL94 V-0¹

***Color:**Black Housing
Gray Cover Plate

Terminal Type:
Fixed Screw

Terminal Screw Size: M2.5

Recommended Torque:
0.5Nm

Max. PCB's:
(2) Vertical

Mounting:
35mm DIN Rail

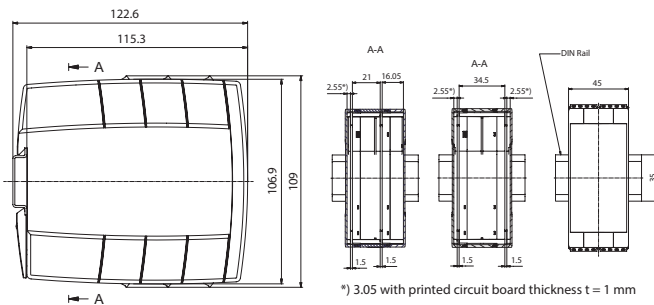
ORDERING INFORMATION

Part Number	Type	Terminals	PCB Connection
90.160	KS4404/F	Fixed Screw	Machine Solder

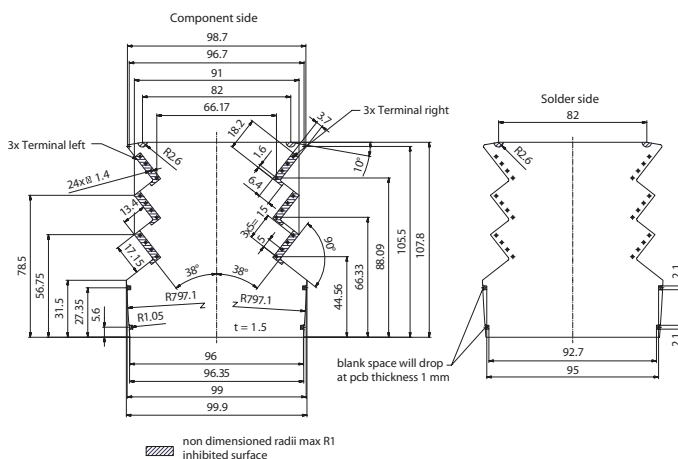
ACCESSORIES

Accessories	Part Number	Type
1 Meter DIN Rail	2511120/1M	TS35x7.5/1M
Terminal Blanking Plug	90.190	KS4403-5-1
Light Pipes, 3mm Grid	90.191	KS4400-7-1
Light Pipes, 5mm Grid	90.192	KS4400-6-1

ENCLOSURE DRAWING (To convert to inches divide by 25.4.)



PCB DRAWING (To convert to inches divide by 25.4.)



*Other colors are available upon request. ¹On request.

**48 Terminal
Pluggable Terminals**



TECHNICAL INFORMATION

Electrical:
10A, 300V, 30-12AWG (Screw);
10A, 300V, 26-12AWG (Spring)

Materials:
Housing - PA-GF
Front Plate - PBT
Terminals - PA

Temperature Range:
Up to 120°C (248°F)

Flammability Rating:
UL94 V-0¹

***Color:**Black Housing
Gray Cover Plate

Terminal Type:
Pluggable Screw /
Pluggable Spring

Terminal Screw Size: M2.5

Recommended Torque:
0.5Nm

Max. PCB's:
(2) Vertical

Mounting:
35mm DIN Rail

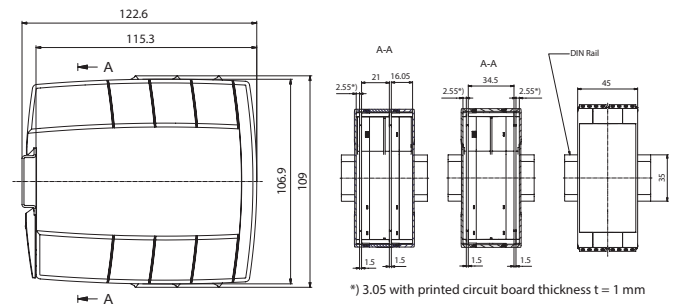
ORDERING INFORMATION

Part Number	Type	Terminals	PCB Connection
90.161	KS4404/PS	Pluggable Screw	Machine Solder
90.162	KS4404/PC	Pluggable Spring	Machine Solder

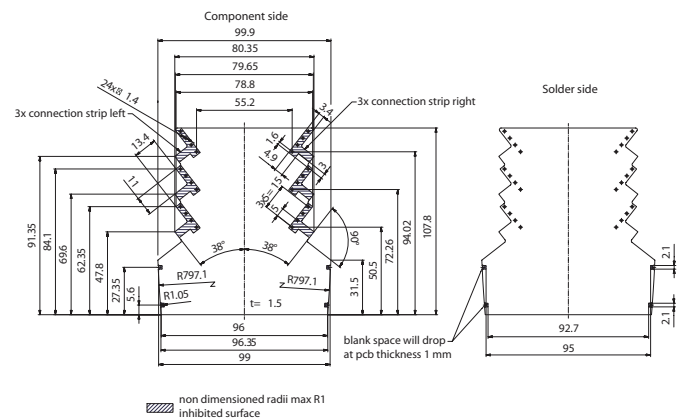
ACCESSORIES

Accessories	Part Number	Type
1 Meter DIN Rail	2511120/1M	TS35x7.5/1M
Terminal Blanking Plug	90.190	KS4403-5-1
Light Pipes, 3mm Grid	90.191	KS4400-7-1
Light Pipes, 5mm Grid	90.192	KS4400-6-1

ENCLOSURE DRAWING (To convert to inches divide by 25.4.)



PCB DRAWING (To convert to inches divide by 25.4.)



KS4400 Enclosure Series

72 Terminal Fixed Terminals



TECHNICAL INFORMATION

Electrical:
10A, 300V, 22-14AWG

Materials:
Housing - PA-GF
Front Plate - PBT
Terminals - PA

Temperature Range:
Up to 120°C (248°F)

Flammability Rating:
UL94 V-0¹

***Color:** Black Housing
Gray Cover Plate

Terminal Type:
Fixed Screw

Terminal Screw Size: M2.5

Recommended Torque:
0.5Nm

Max. PCB's:
(3) Vertical

Mounting:
35mm DIN Rail

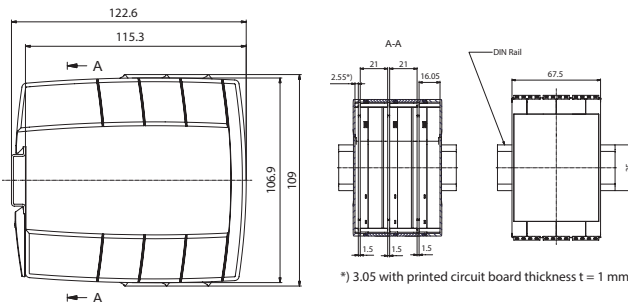
ORDERING INFORMATION

Part Number	Type	Terminals	PCB Connection
90.170	KS4405/F	Fixed Screw	Machine Solder

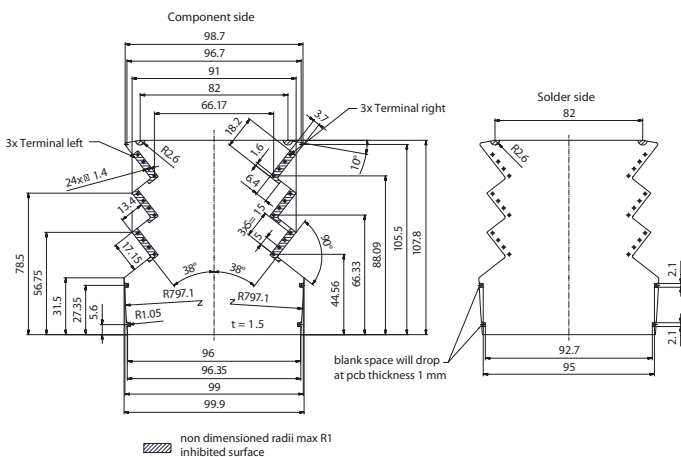
ACCESSORIES

Accessories	Part Number	Type
1 Meter DIN Rail	2511120/1M	TS35x7.5/1M
Terminal Blanking Plug	90.190	KS4403-5-1
Light Pipes, 3mm Grid	90.191	KS4400-7-1
Light Pipes, 5mm Grid	90.192	KS4400-6-1

ENCLOSURE DRAWING (To convert to inches divide by 25.4.)



PCB DRAWING (To convert to inches divide by 25.4.)



*Other colors are available upon request. ¹On request.

72 Terminal Pluggable Terminals



TECHNICAL INFORMATION

Electrical:
10A, 300V, 30-12AWG (Screw);
10A, 300V, 26-12AWG (Spring)

Materials:
Housing - PA-GF
Front Plate - PBT
Terminals - PA

Temperature Range:
Up to 120°C (248°F)

Flammability Rating:
UL94 V-0¹

***Color:** Black Housing
Gray Cover Plate

Terminal Type:
Pluggable Screw /
Pluggable Spring

Terminal Screw Size: M2.5

Recommended Torque:
0.5Nm

Max. PCB's:
(3) Vertical

Mounting:
35mm DIN Rail

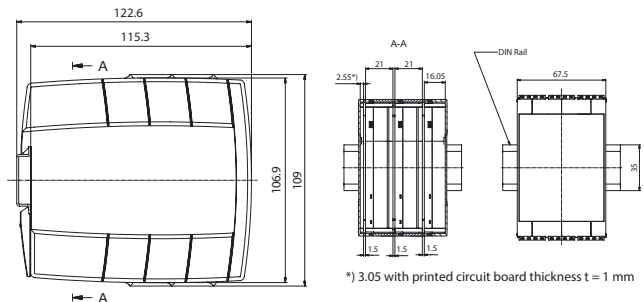
ORDERING INFORMATION

Part Number	Type	Terminals	PCB Connection
90.171	KS4405/PS	Pluggable Screw	Machine Solder
90.172	KS4405/PC	Pluggable Spring	Machine Solder

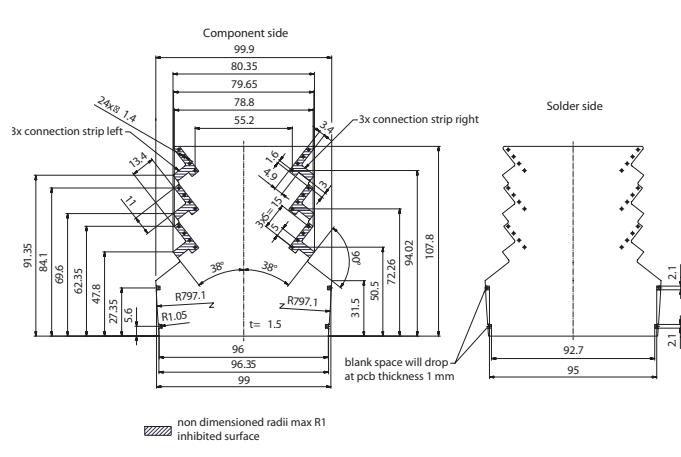
ACCESSORIES

Accessories	Part Number	Type
1 Meter DIN Rail	2511120/1M	TS35x7.5/1M
Terminal Blanking Plug	90.190	KS4403-5-1
Light Pipes, 3mm Grid	90.191	KS4400-7-1
Light Pipes, 5mm Grid	90.192	KS4400-6-1

ENCLOSURE DRAWING (To convert to inches divide by 25.4.)



PCB DRAWING (To convert to inches divide by 25.4.)



**96 Terminal
Fixed Terminals**



TECHNICAL INFORMATION

Electrical:
10A, 300V, 22-14AWG

Materials:
Housing - PA-GF
Front Plate - PBT
Terminals - PA

Temperature Range:
Up to 120°C (248°F)

Flammability Rating:
UL94 V-0¹

***Color:**Black Housing
Gray Cover Plate

Terminal Type:
Fixed Screw

Terminal Screw Size: M2.5

Recommended Torque:
0.5Nm

Max. PCB's:
(4) Vertical

Mounting:
35mm DIN Rail

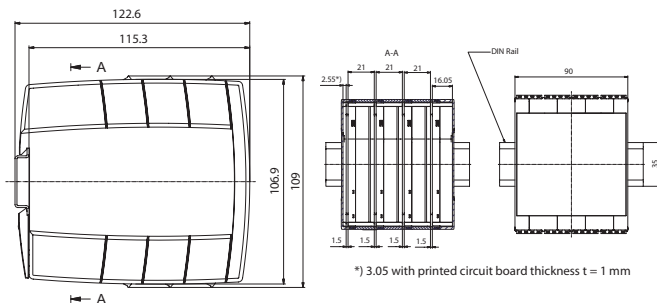
ORDERING INFORMATION

Part Number	Type	Terminals	PCB Connection
90.180	KS4406/F	Fixed Screw	Machine Solder

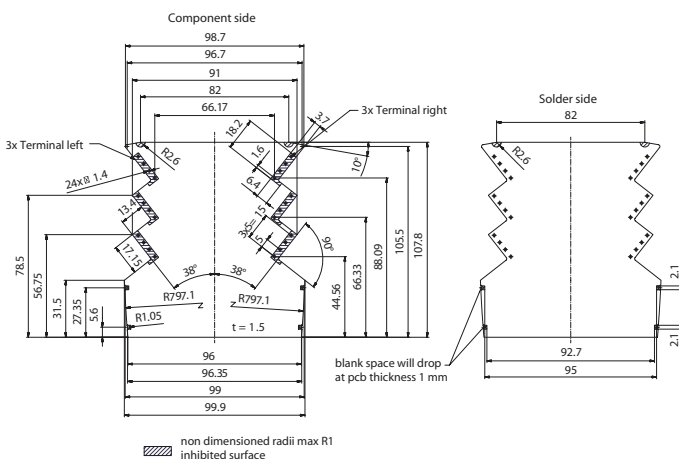
ACCESSORIES

Accessories	Part Number	Type
1 Meter DIN Rail	2511120/1M	TS35x7.5/1M
Terminal Blanking Plug	90.190	KS4403-5-1
Light Pipes, 3mm Grid	90.191	KS4400-7-1
Light Pipes, 5mm Grid	90.192	KS4400-6-1

ENCLOSURE DRAWING (To convert to inches divide by 25.4.)



PCB DRAWING (To convert to inches divide by 25.4.)



*Other colors are available upon request. ¹On request.

**96 Terminal
Pluggable Terminals**



TECHNICAL INFORMATION

Electrical:
10A, 300V, 30-12AWG (Screw);
10A, 300V, 26-12AWG (Spring)

Materials:
Housing - PA-GF
Front Plate - PBT
Terminals - PA

Temperature Range:
Up to 120°C (248°F)

Flammability Rating:
UL94 V-0¹

***Color:**Black Housing
Gray Cover Plate

Terminal Type:
Pluggable Screw /
Pluggable Spring

Terminal Screw Size: M2.5

Recommended Torque:
0.5Nm

Max. PCB's:
(4) Vertical

Mounting:
35mm DIN Rail

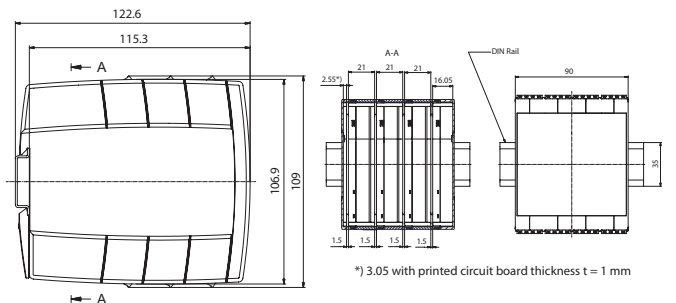
ORDERING INFORMATION

Part Number	Type	Terminals	PCB Connection
90.181	KS4406/PS	Pluggable Screw	Machine Solder
90.182	KS4406/PC	Pluggable Spring	Machine Solder

ACCESSORIES

Accessories	Part Number	Type
1 Meter DIN Rail	2511120/1M	TS35x7.5/1M
Terminal Blanking Plug	90.190	KS4403-5-1
Light Pipes, 3mm Grid	90.191	KS4400-7-1
Light Pipes, 5mm Grid	90.192	KS4400-6-1

ENCLOSURE DRAWING (To convert to inches divide by 25.4.)



PCB DRAWING (To convert to inches divide by 25.4.)

