

6SP SERIES

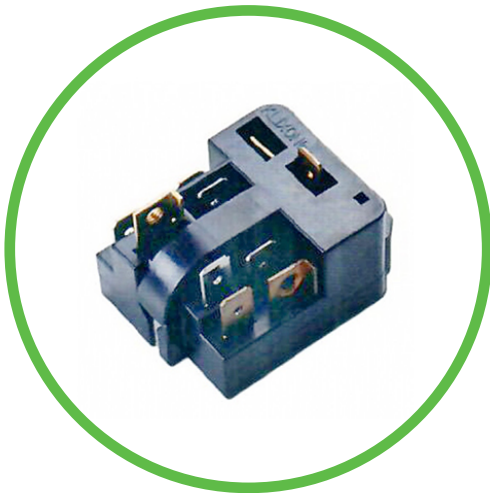
Refrigeration Package

Product Overview

The Sensata Technologies 6SP series Refrigeration Package is a compact motor starter & motor protector package. The 6SP is suitable for compressors used in refrigerators freezers, water coolers, dehumidifiers, vending machines and similar refrigeration applications.

The 6SP serves as combination control which:

1. Uses industry leading 4(5)TM motor protector
2. Performs ceramic PTC (positive temperature coefficient) solid-state starter function
3. Available for RSIS, RSCR, CSIR and CSCR applications
4. Available with 1/4" (QC#250), 3/16" (QC#187) and screw terminations
5. I.B.P.S. function in the starter function (6SP1/3/5/7 series)
6. RoHS compliance



Convenience

- Fits most existing compressor terminal fences
- Elimination of 4(5)TM reapplication in most cases
- Plugs directly & easily onto the compressor terminal pins
- Provides ground, "N" and "L" terminals
- Provides significant installed cost savings opportunities
- Provides low dissipation under normal operating conditions by using stainless steel springs

Cautions

Keep 6SP away from the following atmosphere to avoid deterioration of the characteristics of this product or failures in the worst case.

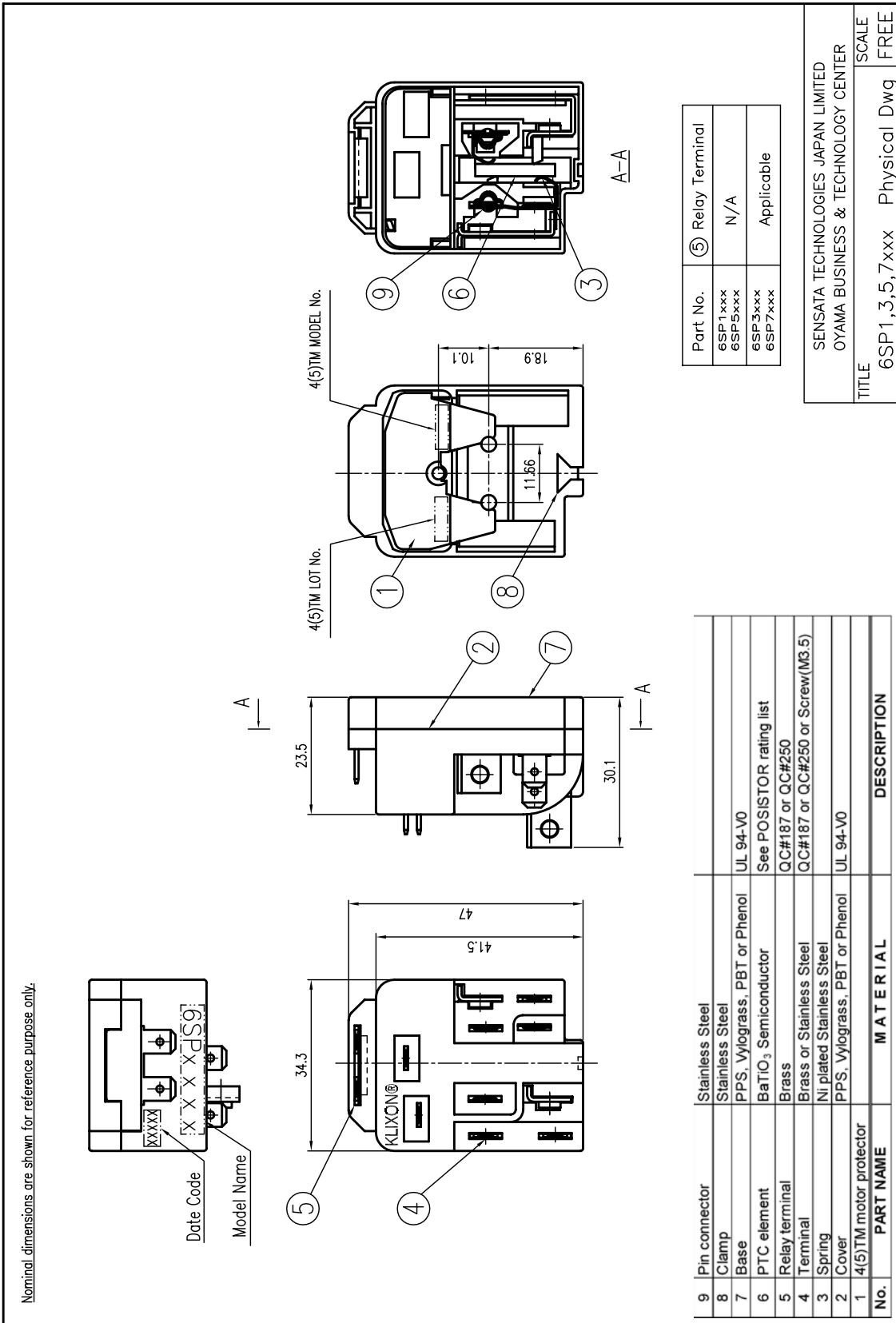
- Corrosive or deoxidizing gases atmosphere (Ex. Cl₂, H₂S, NH₃, SO_x, NO_x, etc.)
- Volatile or flammable gas atmosphere
- Dusty place
- Under abnormal atmosphere pressure
- To be exposed to water or to be condensed dew by excessive humidity
- Under the excessive vibration
- Other atmosphere same as above
- Avoid to use PVC (Polyvinyl Chloride) as an insulation material around the terminals connecting.

6SP is designed to be used in conjunction with an electrical cover.

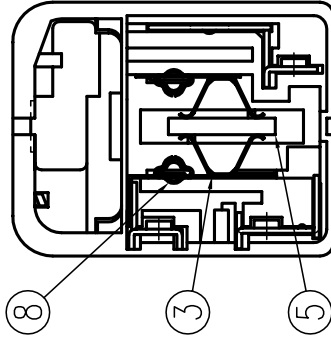
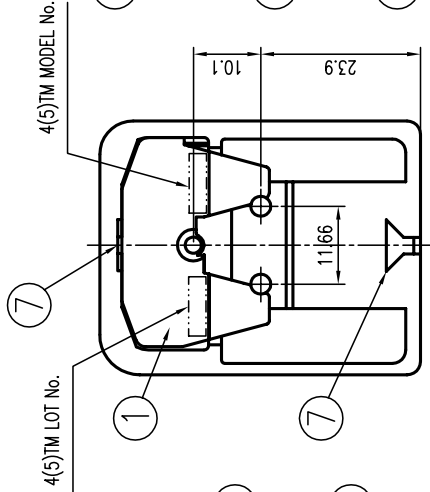
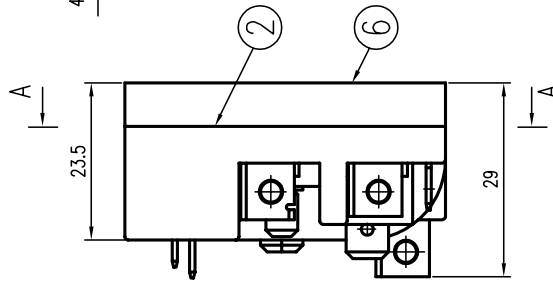
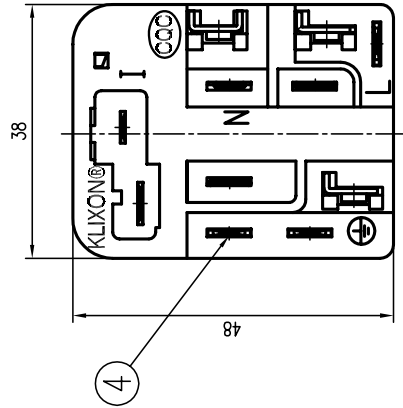
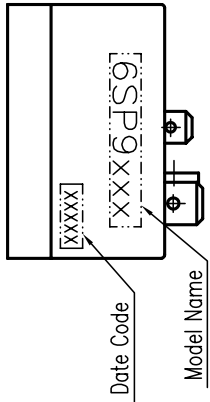


DIMENSION AND PARTS

Dimensions in mm



Nominal dimensions are shown for reference purpose only.

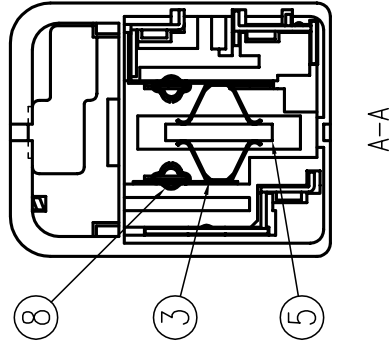
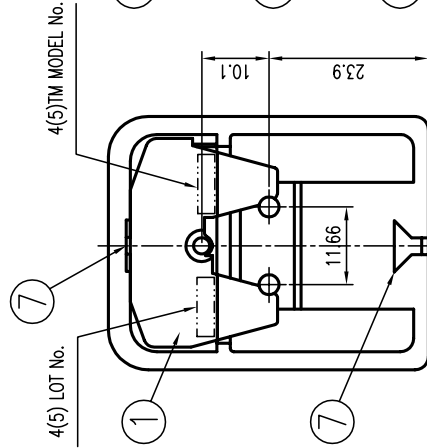
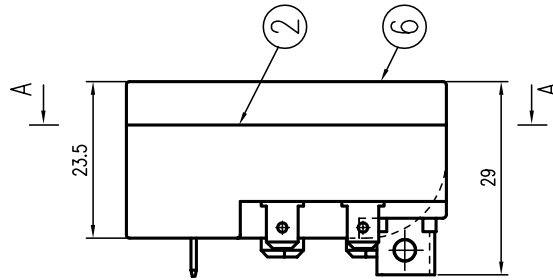
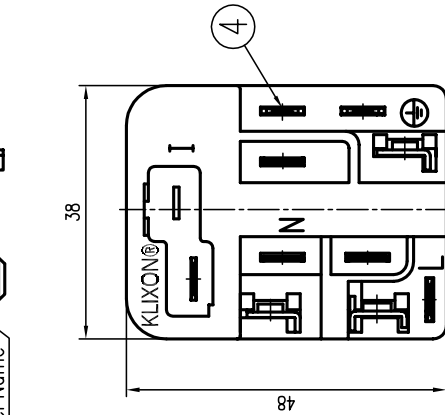
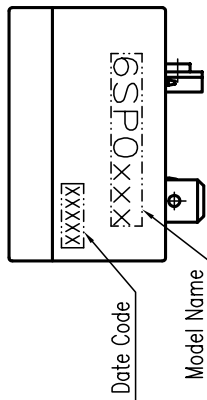


A-A

8	Pin connector	Stainless Steel	
7	Clamp	Stainless Steel	
6	Base	PPS, Vylograss, PBT or Phenol	UL 94-V0
5	PTC element	BaTiO ₃ Semiconductor	See POSISTOR rating list
4	Terminal	Brass or Stainless Steel	QC#187 or QC#250 or Screw(M3.5)
3	Spring	Ni plated Stainless Steel	
2	Cover	PPS, Vylograss, PBT or Phenol	UL 94-V0
1	4(5)TM motor protector		
No.	PART NAME	M A T E R I A L	DESCRIPTION

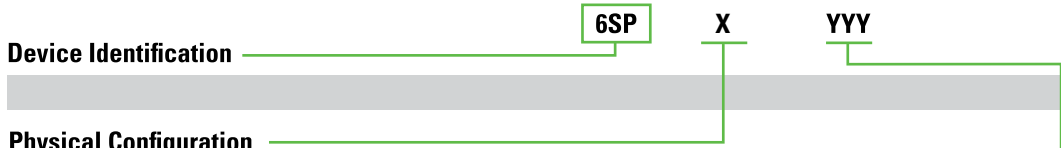
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OYAMA BUSINESS & TECHNOLOGY CENTER	
TITLE	6SP9xxx Physical Dwg
SCALE	FREE

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No.	PART NAME	MATERIAL	DESCRIPTION
8	Pin connector	Stainless Steel	
7	Clamp	Stainless Steel	
6	Base	PPS, Vylograss, PBT or Phenol	UL 94-V0
5	PTC element	BaTiO ₃ Semiconductor	See POSISTOR rating list
4	Terminal	Brass or Stainless Steel	QC#187 or QC#250 or Screw(M3.5)
3	Spring	Ni plated Stainless Steel	
2	Cover	PPS, Vylograss, PBT or Phenol	UL 94-V0
1	4(5)TM motor, protector		

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Physical Configuration

"X"	Physical Drawing	Physical Features		
		Ground Terminal	Relay Terminal	IBPS
1/5	See Pg. 4	X	X	✓
3/7	See Pg. 2	X	✓	✓
9	See Pg. 3	✓	X	X
0	See Pg. 4	✓	X	X

Other Specifications

The Order of Generating (from 001 to 999)
The following are contained in this YYY:

- 4(5)TM Type
- PTC Type
- Compressor Starting Method RSCR, RSIR, CSCR, CSIR
- Housing Material PPS, Vylotglass, PBT or Phenol
- Combination of Terminals QC#187, #250, Screw etc.

R25 (ohms)	Dia. (mm)	Thick (mm)	Vamx(v) Imax(A)	Application Voltage (V)
33±20%	16	2.5	355 / 6	240
22±20%	16	2.5	300 / 7	240
15±20%	20	2.5	400 / 4	240
12+4/-3 Ω	20	3.1	350 / 8	240
15±20%	16	2.5	350 / 8	240



AGENCY APPROVALS & CERTIFICATIONS

ENEC	File 2014531.01
CQC	File CQC02002001335

Revised 02/01/18

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