



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

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

xCompressor Starting Method

RSCR, RSIR, CSCR, CSIR

xHousing Material

PPS, Vyloglass, PBT or Phenol

xCombination of Terminals

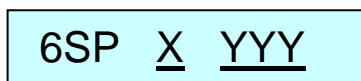
QC#187, #250, Screw etc.

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

Agency Certified

ENEC : File 2014531.01
 CQC : File CQC02002001335
 UL / c-UL : -----

6SP Coding System



6SP : Device identification

X : Physical configurations.

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

Y Y Y :

The order of generating (from 001 to 999)
 The followings are contained in this Y Y Y.
 x4(5)TM Type
 xPTC Type

Cautions

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

xCorrosive or deoxidizing gases atmosphere (Ex. Cl₂, H₂S, NH₃, SOx, NOx, etc.)

xVolatile or flammable gas atmosphere

xDusty place

xUnder abnormal atmosphere pressure

xTo be exposed to water or to be condensed dew by excessive humidity

xTo be expose salt water, oil, chemicals and organic solvent

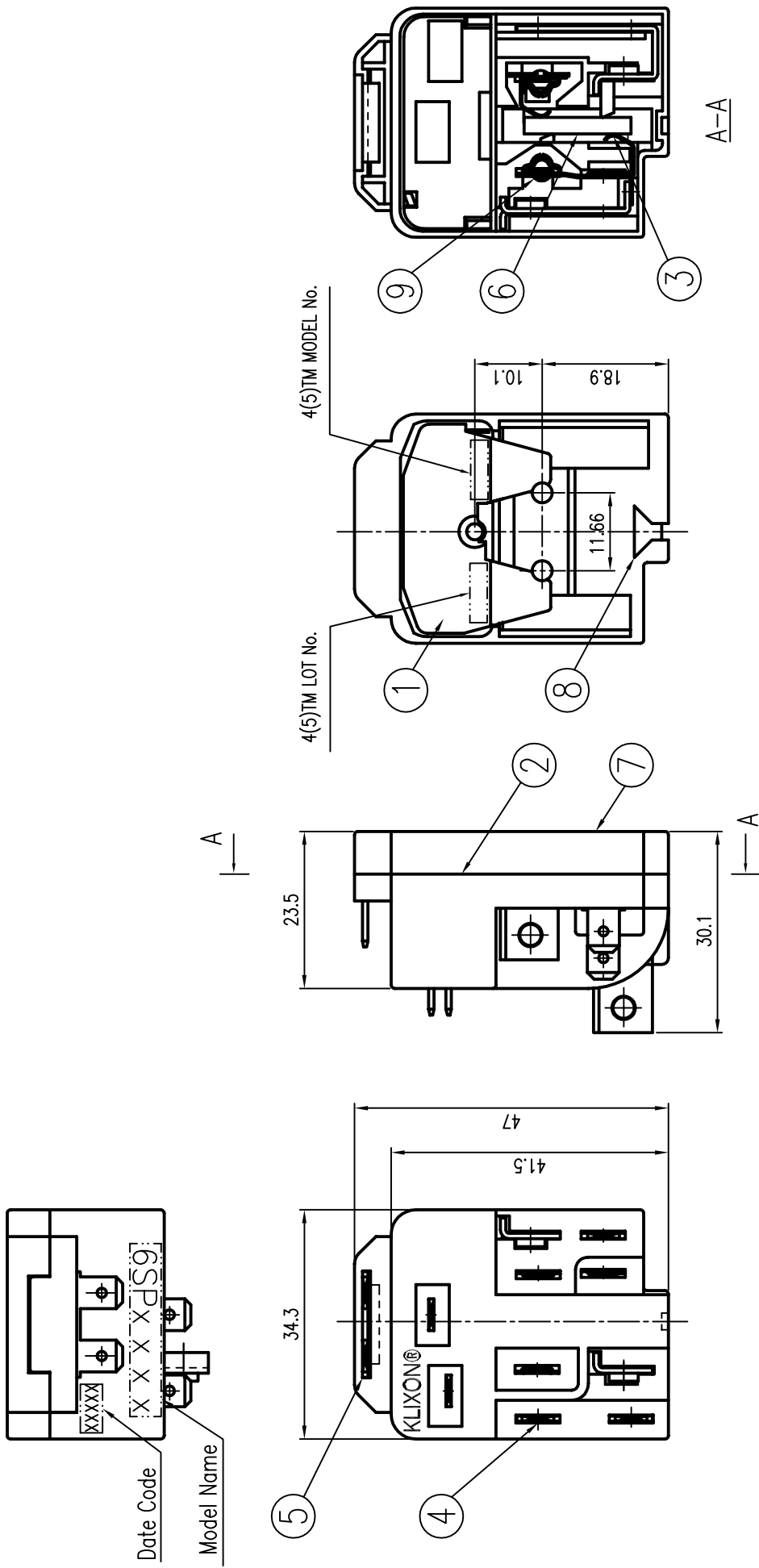
xUnder the excessive vibration

xOther atmosphere same as above

xAvoid 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.

Nominal dimensions are shown for reference purpose only.

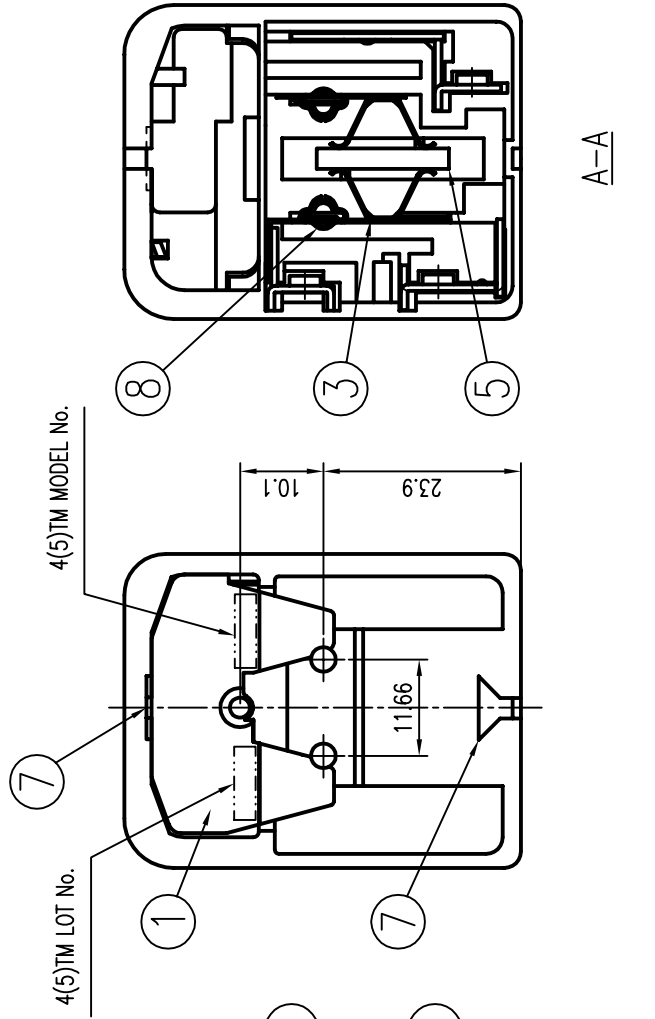
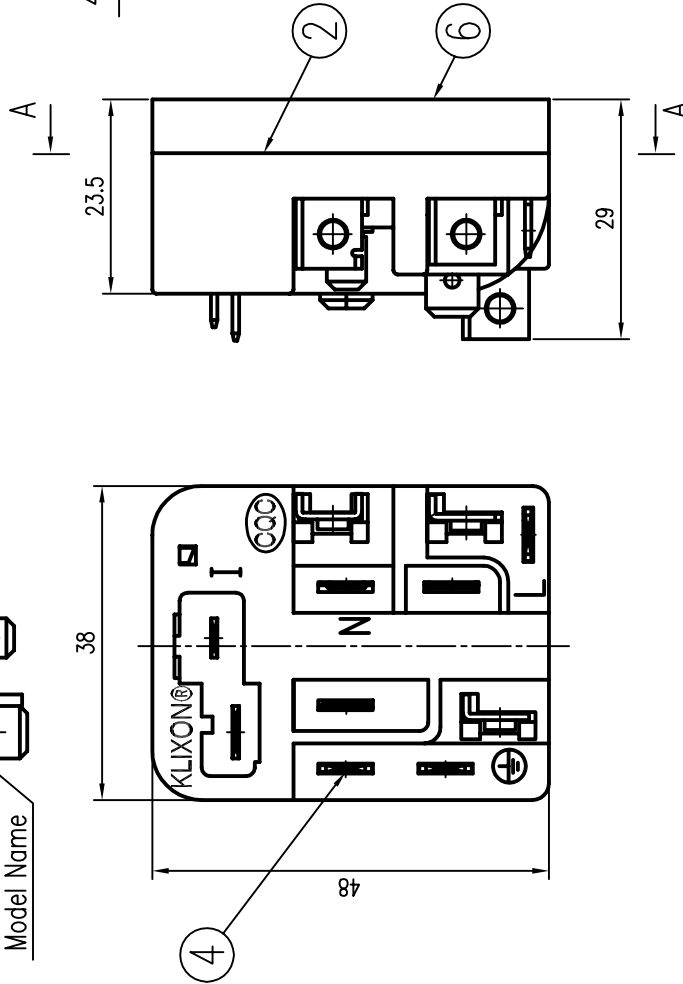
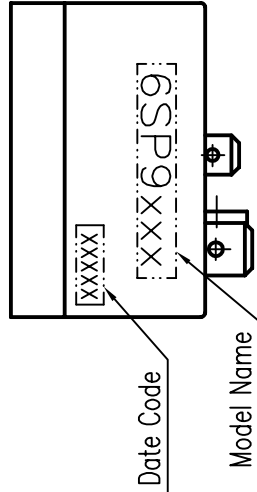


No.	PART NAME	MATERIAL	DESCRIPTION
9	Pin connector	Stainless Steel	
8	Clamp	Stainless Steel	
7	Base	PPS, Vylograss, PBT or Phenol	UL 94-V0
6	PTC element	BaTiO ₃ Semiconductor	See POSISTOR rating list
5	Relay terminal	Brass	QC#187 or QC#250
4	Terminal	Brass or Stainless Steel	QC#187 or QC#250 or Screw(M3.5)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

Part No.	Relay Terminal
6SP1xxx	N/A
6SP5xxx	Applicable

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 TITLE 6SP1,3,5,7xxx Physical Dwg SCALE FREE

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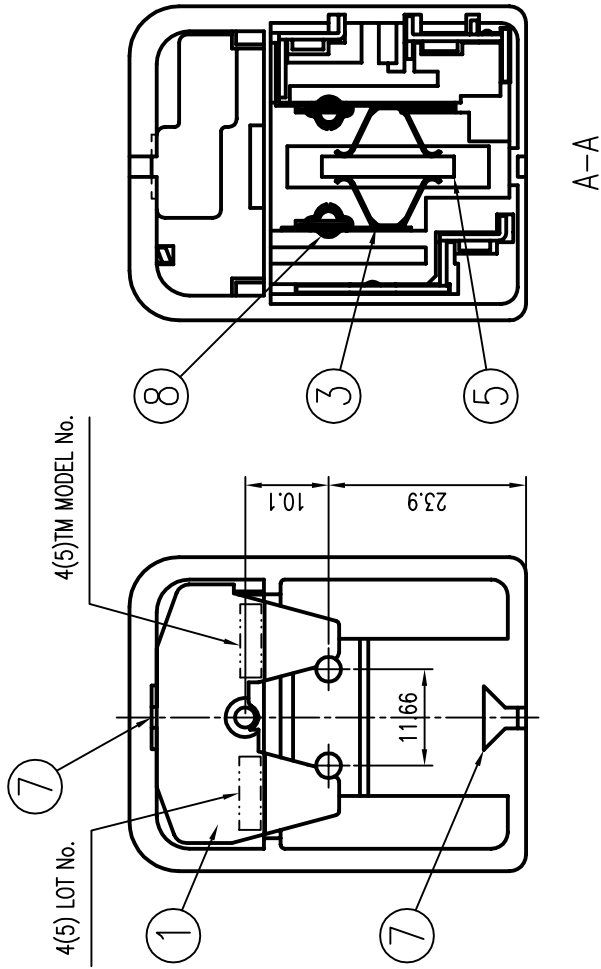
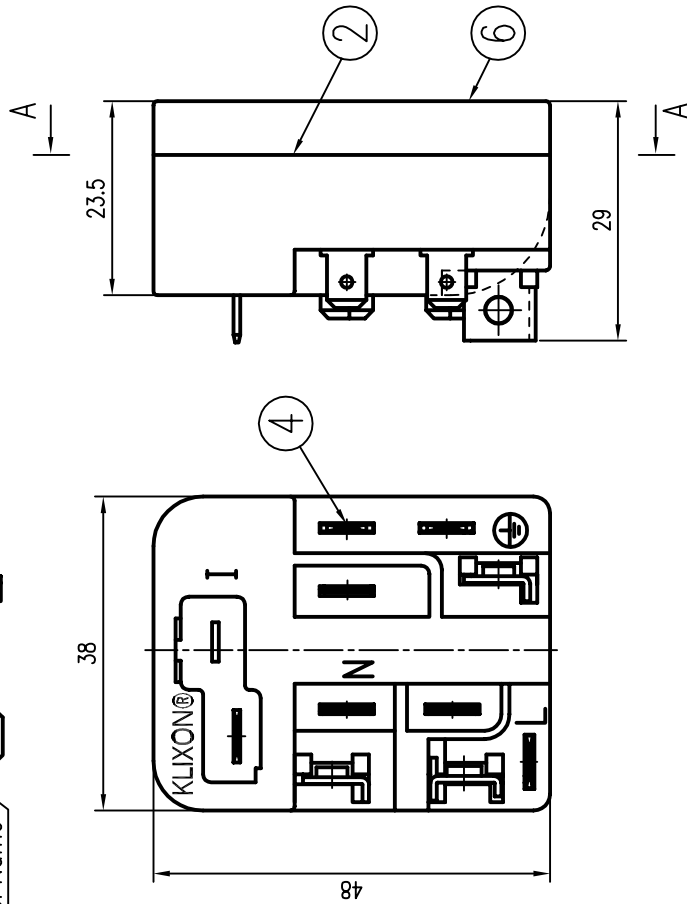
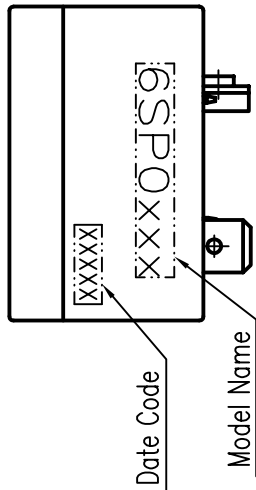
8	Pin connector	Stainless Steel	
7	Clamp	Stainless Steel	
6	Base	PPS, Vylograss, PBT or Phenol	UL 94-V0
5	PTC element	BaTiO ₃ Semiconductor	See POSISTOR rating list
4	Terminal	Brass or Stainless Steel	QC#187 or QC#250 or Screw(M3.5)
3	Spring	Ni plated Stainless Steel	
2	Cover	PPS, Vylograss, PBT or Phenol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

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8	Pin connector	Stainless Steel	
7	Clamp	Stainless Steel	
6	Base	PPS, Vyligrass, 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, Vyligrass, PBT or Phenol	UL 94-V0
1	4(5)TM motor protector		
No.	PART NAME	MATERIAL	DESCRIPTION

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TITLE

6SP0xxx Physical Dwg

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