Product Research Report: Siemens 3RT1025-1AP00 Power Contactor

1. Product Name

Siemens 3RT1025-1AP00 Power Contactor

2. SEO Keywords

- Siemens 3RT1025-1AP00
- Siemens SIRIUS 3RT1 contactor
- Siemens 3RT1025 17A contactor
- Siemens 3RT1025-1AP00 230V AC coil
- Siemens Size S0 power contactor
- Siemens 3RT1 series contactor
- Siemens 3-pole contactor 7.5kW
- Siemens 3RT1025 AC-3 contactor

3. Category

[new] Contactor -> Siemens

4. Product Introduction

Series#: [new] Contactor -> Siemens -> 3RT1 Series Power Contactors
- Siemens 3RT1025-1AP00 Power Contactor, 3-pole, 17A, 230V AC coil
- We have large inventory for Siemens 3RT1 series power contactors, contactor relays and related accessories.
- 100% Original and new, In stock by Siemens Company.
- Delivery time: Ready in stock and 1 days for ship out
- MOQ: 1pcs

5. Brand & Model

model：3RT1025-1AP00
brand：Siemens

6. Service & Applications

The Siemens 3RT1025-1AP00 is a Size S0 power contactor from the SIRIUS 3RT1 series, designed for switching 3-phase motors and resistive loads. Rated for 17 A at AC-3 (400 V) and up to 7.5 kW motor power at 400 V, it features a 230 V AC 50/60 Hz coil. Unlike the 3RT1015, this model does not come with a built-in auxiliary contact — auxiliary blocks must be ordered separately. The screw terminal connections, IP20 finger-safe design, and 35 mm DIN rail mounting make it ideal for motor control panels, pump control, HVAC systems, and industrial automation applications requiring higher current capacity than Size S00 contactors can provide.

7. Specifications Table

Feature	Specification
Product Type	Power Contactor
Order Number	3RT1025-1AP00
Series	Siemens SIRIUS 3RT1
Size	S0
Number of Main Poles	3 (3 NO)
Coil Voltage	230 V AC, 50/60 Hz
Rated Operational Current (Ie) - AC-3	17 A @ 230 V; 17 A @ 400 V; 17 A @ 500 V; 12.5 A @ 690 V
Rated Operational Current (Ie) - AC-1	32 A (resistive load, 40°C)
Motor Power (P) - AC-3	4.0 kW @ 230 V; 7.5 kW @ 400 V; 9.0 kW @ 500 V; 11.0 kW @ 690 V
Utilization Category	AC-3 (Motor switching), AC-1 (Resistive loads)
Coil Power Consumption (Pick-up)	approx. 70 VA
Coil Power Consumption (Holding)	approx. 7.0 VA
Built-in Auxiliary Contact	None (must be ordered separately, e.g., 3RH1921-1EA11)
Connection Type	Screw terminals
Mounting	35 mm DIN Rail or screw mounting
Dimensions (H × W × D)	93 × 45 × 95 mm
Weight	approx. 0.45 kg
Degree of Protection	IP20 (Finger-safe)
Rated Insulation Voltage (Ui)	690 V
Rated Impulse Withstand Voltage (Uimp)	6 kV
Operating Temperature	-25°C to +60°C
Mechanical Life	10 million switching cycles
Electrical Life (AC-3)	1 million switching cycles
Switching Frequency (AC-3)	Up to 15 operations per hour
Standards	IEC 60947-4-1, EN 60947-4-1
Vibration Resistance	Up to 10g (IEC 60068-2-6)
Shock Resistance	Up to 150g (IEC 60068-2-27)

8. FAQ

Q: What is the difference between 3RT1025-1AP00 and 3RT1015-1AP01?
A: The 3RT1025-1AP00 is Size S0 (17 A, 7.5 kW), while the 3RT1015-1AP01 is Size S00 (9 A, 4 kW). The S0 size has a larger frame, higher current rating, and no built-in auxiliary contact.

Q: Does the 3RT1025-1AP00 come with auxiliary contacts?
A: No, this specific model does not come with a built-in auxiliary contact block. You must order a snap-on auxiliary block separately, such as the 3RH1921-1EA11 (1 NO + 1 NC) or 3RH1921-1FE22 (2 NO + 2 NC).

Q: What coil voltage does the 3RT1025-1AP00 use?
A: It uses a 230 V AC coil operating at 50/60 Hz. The "1AP00" suffix indicates 230 V AC coil voltage in the Siemens naming convention.

Q: What motor power can this contactor switch at 400 V?
A: The 3RT1025-1AP00 can switch motors up to 7.5 kW at 400 V AC under AC-3 utilization category.

Q: What overload relay should be used with this contactor?
A: The standard matching overload relay for Size S0 is the 3RU11 21-4DB0 or similar 3RU series thermal overload relay, or electronic overload relays from the 3RB series.

Q: Can this contactor be used for AC-4 duty (plugging/inching)?
A: Yes, but the rated current must be derated significantly — to approximately 5–6 A for AC-4 duty depending on the switching frequency, due to increased heat from frequent arcing.

Q: What are the dimensions of the 3RT1025-1AP00?
A: The dimensions are 93 mm (H) × 45 mm (W) × 95 mm (D). The width is the same as Size S00 (45 mm), but the height and depth are larger.

Q: How is the contactor mounted?
A: It can be mounted on a standard 35 mm DIN rail or via screw mounting using the provided mounting holes at the base.

Q: What is the switching frequency limit for AC-3 duty?
A: The 3RT1025-1AP00 supports up to 15 switching operations per hour under AC-3 duty. For higher frequencies, contact Siemens technical support for derating guidelines.