

# STC-9200 Temperature Controller

Category: Refrigeration

written by [www.mbsm.pro](http://www.mbsm.pro) | 12 January 2026



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"The STC-9200 digital temperature controller is a professional-grade thermostat designed for industrial refrigeration and freezing applications. This advanced multi-stage controller features precise temperature regulation from -50°C to +50°C, integrated defrost management, and robust relay capacity for compressor control, making it ideal for commercial cooling systems and display cases."

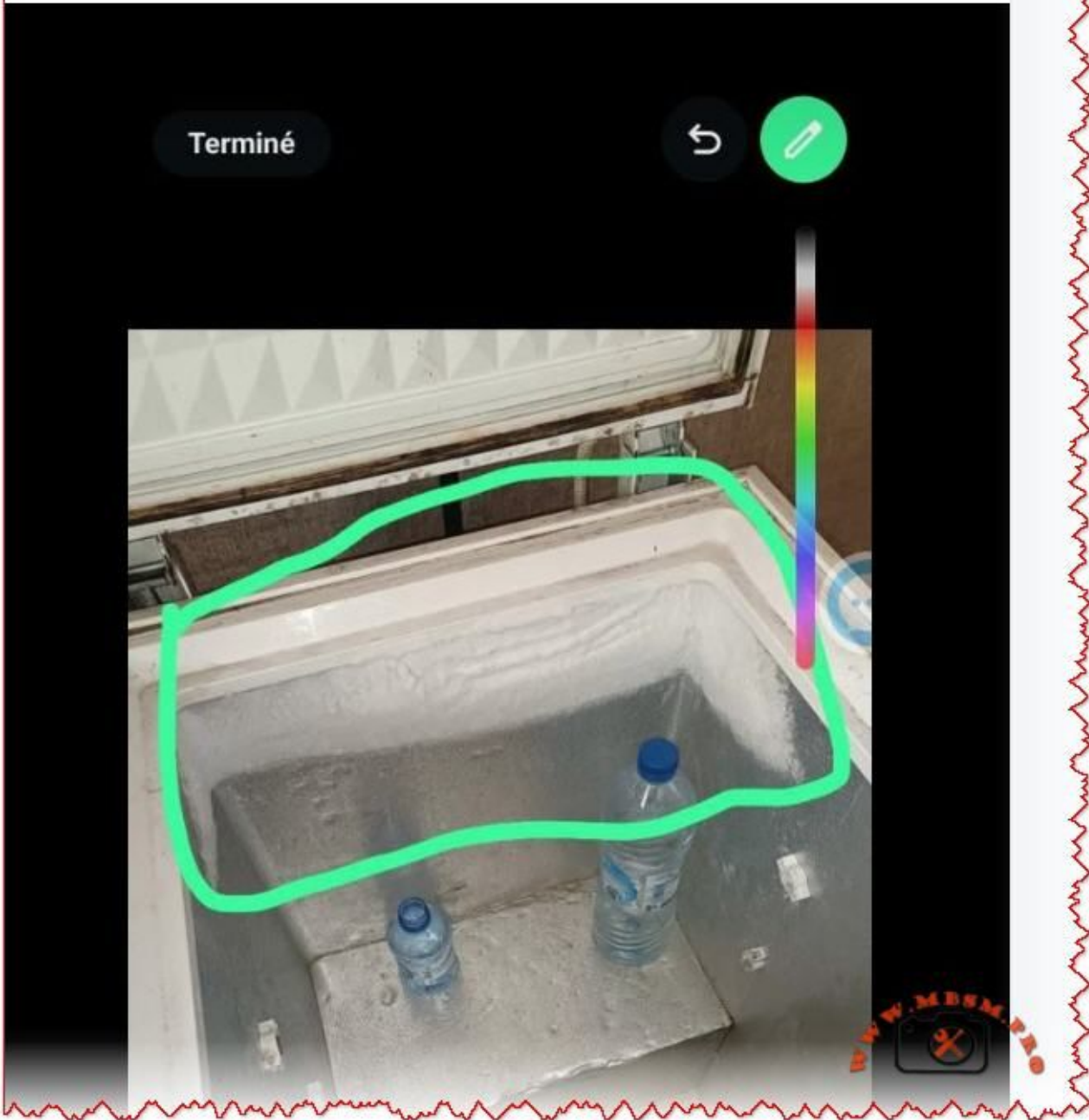
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## The 5 Pillars of Refrigeration Diagnosis: Professional HVAC

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Where is the problem?



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Professional HVAC technicians rely on five critical diagnostic pillars: suction pressure, discharge pressure, superheat, subcooling, and saturation temperature relationships. Mastering these five measurements eliminates guesswork, accurately identifies refrigeration problems, and ensures proper system troubleshooting without expensive callbacks or equipment damage.

## SECOP SC21G COMPRESSOR

Category: Refrigeration

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Secop SC21G is a high-performance hermetic reciprocating compressor designed for commercial refrigeration and freezing applications using R134a refrigerant. This guide covers detailed specifications, technical parameters, and installation requirements for 220-240V/50Hz systems at up to 1.3 amperes.

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# Samsung MSE4A1Q-L1G AK1, hermetic reciprocating refrigerator compressor

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The Samsung MSE4A1Q-L1G AK1 is a hermetic reciprocating refrigerator compressor designed for domestic LBP applications with R600a refrigerant and a nominal cooling capacity around 175–180 W at ASHRAE conditions, equivalent to roughly 1/4 hp. Engineers value this model for its efficient RSCR motor and robust design. □

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## Carrier Inverter AC Error Codes, Indoor and Outdoor Protection

Category: air conditioner

written by [www.mbsm.pro](http://www.mbsm.pro) | 12 January 2026

## Error Display



| Indoor duplity | Outdoor LED Flash | Error Information  |
|----------------|-------------------|--|
| E0             | * 25 Times        | Indoor unit EEPROM parameter error                                       |
| E2             | * 27 Times        | Zero-crossing signal detection error                                     |
| E4             | * 28 Times        | The indoor fan spersing sperating outside thcutl or short circuit        |
| E5             | * 28 Times        | Eraporator coil temperature sensor is open circuit or short circuit      |
| EC             | * 30 Times        | Refrigerant leakage detected   |
| E1             | * 2 Times         | Indoor/outdoor units communication error                                 |
| F1             | * 11 Times        | Outdoor ambient temperature sensor is open circuit or short circuit      |
| F2             | * 10 Times        | Condeneer coil temperature sensor is open circuit or short circuit       |
| F3             | * 8 Times         | Compressor discharge temperature sensor is open circuit or short circuit |
| F4             | * 1 Time          | Outdoor unit EEPROM parameter error                                      |
| F5             | * 12 Times        | Outdoor DC fan molor fault   |
| F6             | * 9 Times         | Compressor Suction temperature sensor fault                              |
| L3             | * 33 Times        | Drive phase curent overload fault  |
| L4             | * 34 Times        | Phase current sampling fault   |
| P0             | * 6 Times         | IPM module fault   |
| F2             | * 7 Times         | Compressor shell temperature overheat protection                         |
| F4             | * 4 Times         | Compressor starting abnormal   |
| P4             | * 5 Times         | Compressor out-of-step abnormal  |
| F0             | * 13 Times        | Outdoor AC current protection  |
| L1             | * 31 Times        | Drive bus vollage overload protection                                    |
| L2             | * 32 Times        | Drive bus vollage over-low protection                                    |
| F1             | * 15 Times        | Outdoor Over-high/Over-low AC voltage protection                         |
| P5             | * 14 Times        | Compressor phase current protection                                      |
| P6             | * 18 Times        | Outdoor Over-high/Over-low DC voltage protection                         |
| P7             | * 17 Times        | IPM temperature over heat protection                                     |
| P8             | * 18 Times        | Compressor discharge temperature overheat protection                     |
| P9             | * 19 Times        | Cooling indoor unit anti-freezing protection                             |
| PU             | * 20 Times        | Cooling outdoor coil overheat protection                                 |
| PE             | * 21 Times        | Heating indoor coll overheat protection                                  |
| PC             | * 22 Times        | Cooling outdoor ambient temperature over-low protection                  |
| PH             | * 23 Times        | Heating outdoor ambient temperature over-high protection                 |

\* Flash

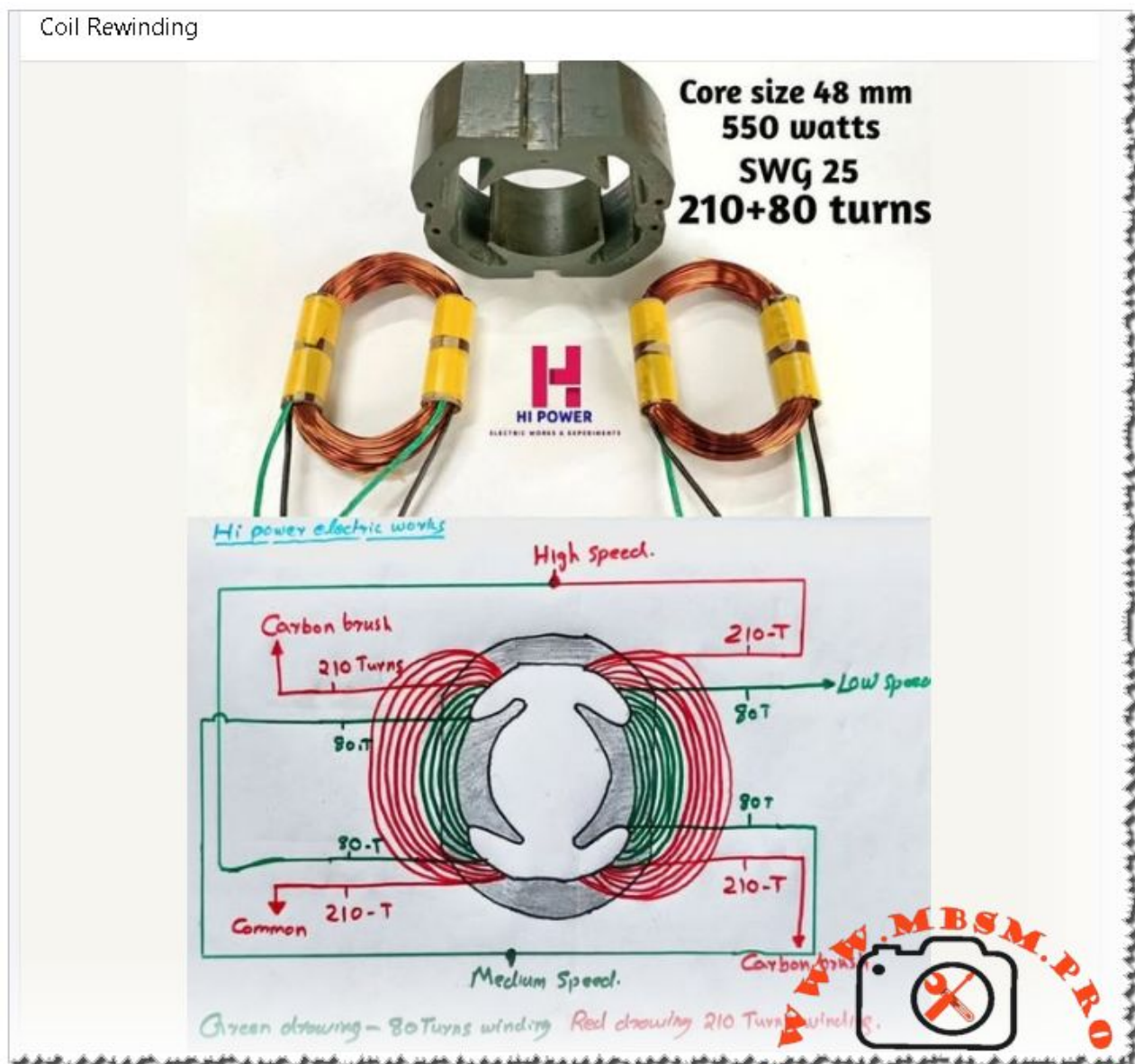
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Carrier inverter air conditioners use detailed error codes to protect the compressor, sensors, and inverter electronics. Codes such as E0, F0, P0, and P6 reveal EEPROM faults, outdoor AC current problems, IPM module errors, and DC bus voltage issues, giving HVAC technicians a clear roadmap for safe, accurate troubleshooting and long-term system reliability.

# Coil Rewinding, Universal Motor, 550 W

Category: Global Electric

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Coil rewinding for a 550-watt universal mixer-grinder motor with a 48 mm core is more than just replacing burnt copper. The technician must reproduce the original 210+80 turn field coils with SWG 25 wire, respect the high-medium-low speed connections, and follow best rewinding practices to keep torque, speed, and temperature under control.

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# LG Inverter AC Error Codes: Indoor and Outdoor Unit Professional Guide

Category: air conditioner

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Model: Inverter AC

Indoor Unit

| ERROR CODE | DISCRIPTION  |
|------------|--|
| 1          | Indoor unit room temperature sensor error            |
| 2          | Indoor unit inlet pipe sensor error                  |
| 3          | Wired remote control error                           |
| 4          | Float switch error                                   |
| 5          | Communication error between indoor and outdoor units |
| 6          | Indoor unit outlet pipe sensor error                 |
| 9          | Indoor unit EEPROM error                             |
| 10         | Indoor unit BLDC fan motor lock                      |
| 12         | Indoor unit middle pipe sensor error                 |

Outdoor Unit

| ERROR CODE | DISCRIPTION  |
|------------|--|
| 21         | DC Peack (IPM) fault                                 |
| 22         | CT2 (Max CT)   |
| 23         | DC link low voltage                                  |
| 26         | DC Comp position error                               |
| 27         | PSC fault  |
| 29         | Comp phase over current                              |
| 32         | Inverter compressor D pipe overheat                  |
| 34         | High pressure sensor high                            |
| 35         | Low pressure sensor low                              |
| 36/38      | Refrigerant leak detection                           |
| 37         | Exceed the compression ration limit                  |
| 40         | CT sensor error                                      |
| 41         | Discharge pipe sensor error                          |
| 42         | Low pressure sensor error                            |
| 43         | High presure sensor error                            |
| 44         | Outdoor air sensor error                             |
| 45         | Cond middle pipe sensor Error                        |
| 46         | Suction pipe sensor Error                            |
| 51         | Excess capacity ( Mismatch between IDU and odu unit) |
| 53         | Communication error                                  |
| 61         | Cond. Pipe high                                      |
| 62         | Heat sink sensor temp. High                          |



|    |                                     |
|----|-------------------------------------|
| 67 | BLDC motor fan lock                 |
| 72 | Detect 4 way valve transfer failure |
| 93 | Communication error                 |

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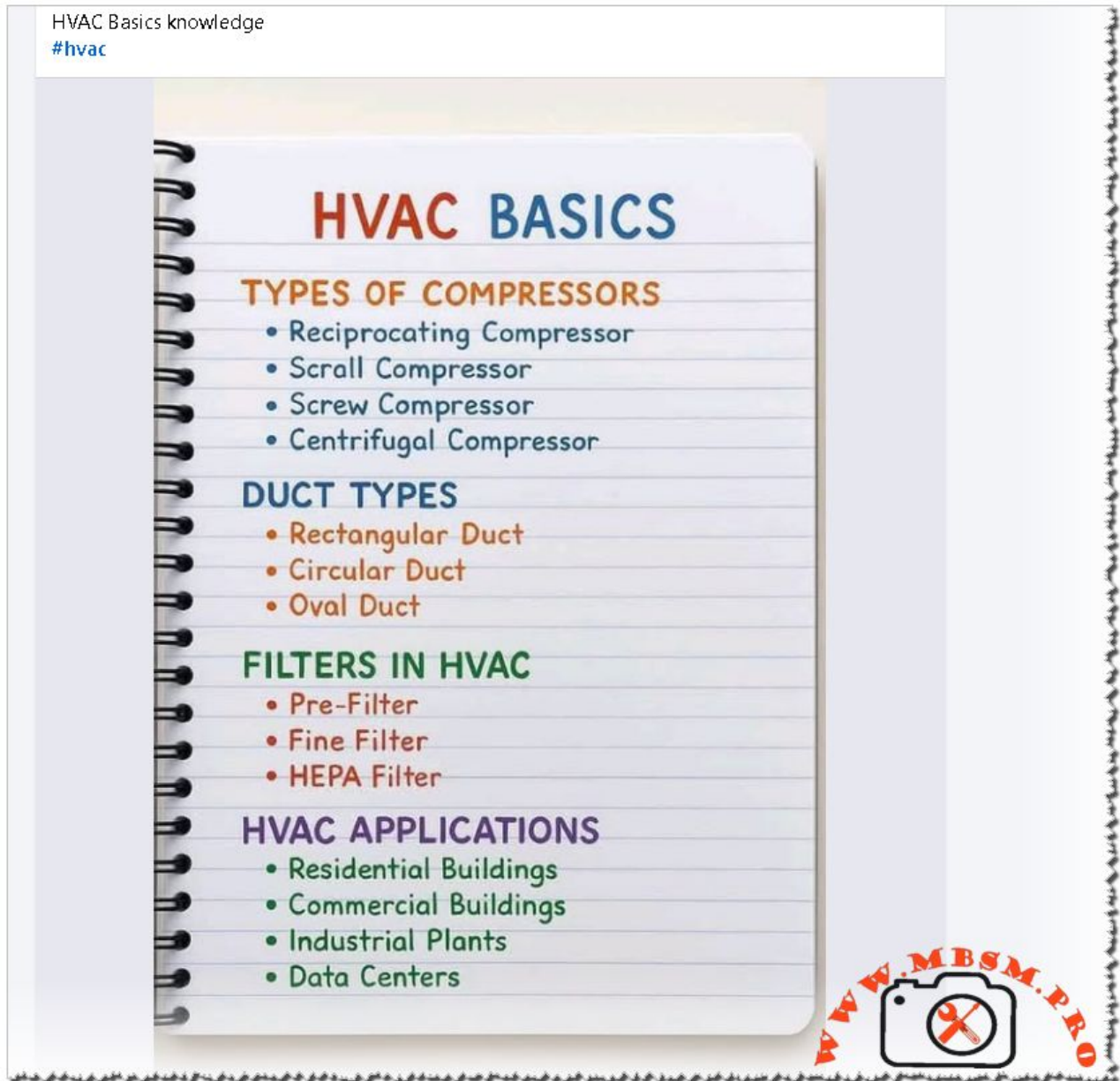
LG inverter air conditioner error codes give technicians a precise window into what is happening inside both indoor and outdoor units. From simple room

temperature sensor faults to complex IPM and DC peak alarms, decoding these numbers correctly is critical for fast, safe, and accurate HVAC troubleshooting on modern LG split systems.

# HVAC Basics: Compressors, Ducts, Filters, and Real-World Applications

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HVAC basics start with understanding how compressors, ducts, and filters work together to move heat and clean air in any building. From reciprocating and scroll compressors to rectangular and circular ducts, each choice affects comfort, energy efficiency, and reliability in residential, commercial, industrial, and data center applications.

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# Brass Male Flare Union Fittings for Refrigeration and HVAC Systems

Category: Mbsmpro

written by [www.mbsm.pro](http://www.mbsm.pro) | 12 January 2026

What is it called



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Brass male flare union fittings are essential components in refrigeration and HVAC systems, providing reliable mechanical connections between flared copper tubes without the need for brazing. These brass flare unions support a wide operating temperature range and are widely used for service connections, line extensions, and removable joints in air-conditioning and refrigeration installations.

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## Electrical unit conversion reference

# table: HP to watts, KVA to amps, tons refrigeration to kW

Category: Global Electric

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|         |                      |
|---------|----------------------|
| 1 HP    | 746 WATT             |
| 1 AMPS  | 240 WATT, {V=240}    |
| 1 HW    | 1000 WATT            |
| 1 KW    | 0.746 KW             |
| 1 KVA   | 1.74 AMPS, {P.F=0.8} |
| 1 AMPS  | 0.8 KW               |
| 1 KW    | 0.24 KW, [V=240]     |
| 1 KW    | 1.25 KVA             |
| 1 UNITS | 1.341 HP             |
| 1 UNITS | 0.7188 KVA [V=415]   |
| 1 GΩ    | 1 KWH                |
| 1 kΩ    | 1000 WATTS           |
| 1 KW    | 1000 WH              |
| 1 WATT  | 0.001 KVA            |
| 1 kΩ    | 1000 Ω               |
| 1 kΩ    | 1000 kΩ              |
| 1 M     | 100,000 Ω            |
| 1 Ω     | 1.001 KW             |
| 1 KVA   | 1.391 AMPS           |
| 1 TON   | 3.517 KW             |
| 1 KVA   | 1000 VA              |
| 1 M     | 1.74 AMPS            |
| 1 kΩ    | 1000 Ω               |
| 1 kΩ    | 1000 kΩ              |
| 1 Ω     | 0.000001 MΩ          |
| 1 KVA   | 1.391 AMPS           |
| 1 TON   | 3.517 KW             |
| 1 KVA   | 1000 VA              |



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Electrical unit conversions are essential knowledge for HVAC technicians and refrigeration engineers. This comprehensive reference guide provides quick access to conversion formulas, technical specifications, and practical examples for comparing power ratings, calculating system requirements, and optimizing equipment selection across different measurement standards.