

Schneider Series Service Manual

140EHC20800SC

1. Description

The Schneider Electric 140EHC20800SC is a high-speed counter module designed for precision counting tasks. It supports both incremental and quadrature input types and operates at a counting frequency of up to 500,000 Hz, making it highly efficient for various applications.

2. Specifications

Specification	Value
Manufacturer	Schneider Electric
Product	Line Modicon Quantum
Part	Number 140EHC20800SC
Product	High Speed Counter Module
Counting	Input Type Incremental or quadrature
Counting	Frequency 500000 Hz
Input	Resistance 10 kOhm discrete input
Discrete	Output Number 4
Discrete	Output Type Field Effect Transistor (FET)
Load	Current 0.5 A
Maximum	Leakage Current 0.4 mA state off
Protection	Type 36 V transorb discrete output
Output	Short-Circuit Protection Blown fuse 2.5 A
External	Power Requirement 19.2 to 30 V
Resistance	to Electromagnetic Fields 9.1 V/m
Operating	Altitude 5000 m

3. Product Information

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Technical specifications for 140EHC20800SC

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Product Line Modicon Quantum

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Resistance to Electromagnetic Fields 9.1 V/m

Operating Altitude 5000 m

Description

The 140EHC20800SC model from Schneider Electric is a specialized high-speed counter module tailored for demanding counting applications. It can accept both incremental and quadrature input types, allowing for enhanced versatility across different setups. This module achieves an impressive counting frequency of 500,000 Hz, ensuring rapid and accurate measurement.

With an input resistance of 10 kOhm for discrete inputs, it can be integrated easily into various systems. Users will benefit from four discrete outputs, each utilizing Field Effect Transistor (FET) technology. This design enables a load current of 0.5 A, which is suitable for a wide range of tasks. The module is engineered to minimize leakage, with a maximum current of 0.4 mA while in an off state.

In terms of safety and protection, the module features a 36 V transorb discrete output and a blown fuse rated at 2.5 A to protect against short circuits. It requires an external power supply within the range of 19.2 to 30 V, ensuring adaptability to various powering options.

This counter module is also designed with resistance to electromagnetic fields, with an impressive rating of 9.1 V/m, contributing to its reliability in challenging environments. For installations at high altitudes, the module can operate effectively at elevations up to 5000 meters.