



Label and location

SMART WIRES
REIMAGINE THE GRID

SmartValve™ v1.04
Model: 10-1800 R1
Serial No: JJYY-NNN-MVAR-MCC-FR-06

Made in USA
Approximate Mass: 16535 lbs. (7500 kg) [See Note 3]
Mfg. Date: Month, Year
Frequency: 50/60 Hz

FCC **CE**
FCC ID: QPS1010
IC: 22326-01010

Patent <https://www.smartwires.com/patents>

JJYY-NNN-MVAR-MCC-FR-06
Smart Wires Inc. 1035 Swabia Ct. Suite 130, Durham, NC 27703, USA
+1 (855) 892-3340

SmartValve™
Connection Diagram

Diagram Key:

1. Input Terminal
2. Output Terminal
3. Surge Arrester
4. High-Pass Filter
5. Low-Pass Filter
6. Surge Protection
7. Silicon-Controlled Rectifier (SCR)
8. Vacuum-Switch Link (VSL)
9. Communication Link
10. 10-10-10 Voltage-Source Converter (VSC)
11. Converter-Level Bypass (CLB)

RATINGS

Max. Reactive Power: 10 MVAR @ 1800 A RMS
 Max. Continuous Current (Injection Mode): 1800 A RMS [See Note 1]
 Max. Continuous Current (Monitoring Mode): 2250 A RMS [See Note 1]
 Max. Emergency Current (Injection Mode): 2150 A RMS (120 minutes) [See Note 1 and Note 2]
 Max. Emergency Current (Monitoring Mode): 2050 A RMS (3 minutes) [See Note 1 and Note 2]
 Max. Injected Voltage: 5500 V RMS [See Note 4]
 Max. Fault Rating: 40 kA RMS for 1 s, 100 kA peak (50 Hz), 104 kA peak (60 Hz)

NOTES

Note 1: Applies at 40 °C ambient, 1000 W/m² solar radiation, 1000 m elevation, LCS fans operating at 40% duty cycle, enclosure cooler fans operating at 40% duty cycle, external coating at end of life.
 Note 2: Max. emergency current applies after continuous operation at the max. continuous current of the same mode.
 Note 3: Single point lifting is allowed with tilting angles 60 deg min. from horizontal and 30 deg max. from vertical.
 Note 4: Device contains DC capacitors that may remain energized after device de-energization.
 Note 5: Refer to the O&M Manual for details and full set of precautions. Precautions listed above are a subset.
 Note 6: Liquid cooling system: 50/50 Ethylene glycol / water, 55 liters, contains no PCBs.