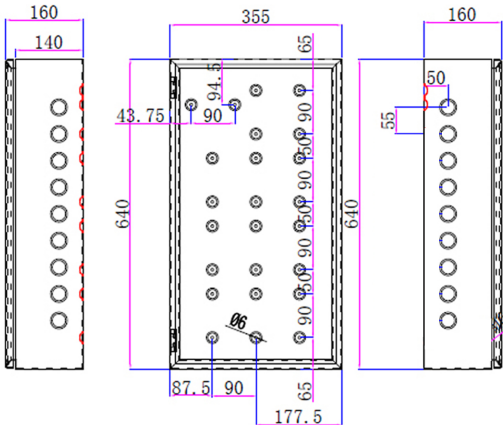


NEX-EVHP-4CH
Harmony EVHP Smart Panel

Datasheet

Issued: Nov 2025

Version : 1.3



The EVECTRIX NEX-EVHP Smart Harmony 4CH panel is an advanced and smart electrical load-management controller designed to optimize power distribution in constrained electrical systems. The unit is equipped with three NEMA-rated 40 Amp contactors, enabling connection and control of up to four 208/240 V appliances, including the Level 2 EV charger, Heat Pump, DHW tank, Dryer, and Range, each supporting a maximum operational load of 40 Amp per channel. This architecture makes the system ideal for applications where the existing electrical panel lacks sufficient capacity for additional dedicated circuits, such as a Level 2 EV charger or a new high-performing heat pump.

KEY FEATURES

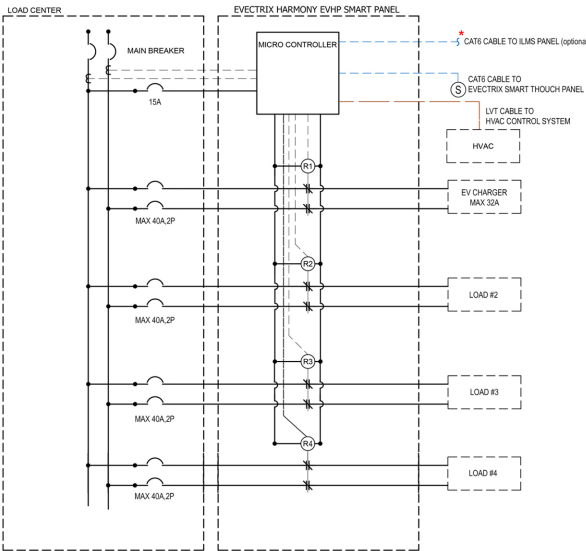
- ▶ Supports standalone operation for single-family homes or whole networked operation for MURBs, townhouses, and condominium environments.
- ▶ Continuously measures the electrical demand of connected appliances and, in multi-unit applications, monitors the main service panel for available capacity via CT's.
- ▶ Supports deployment of up to 250 units per smart Harmony Panel, enabling large-scale applications in multi-residential buildings.
- ▶ Offers advanced HVAC integration, including temperature setpoints, fan speed control, zoning, weekly scheduling, night setback mode, and EV-priority override functionality.
- ▶ Operates independently in standalone mode or as part of a coordinated, multi-panel network through integration with the EVECTRIX ILMS panels.
- ▶ Intelligently distributes available electrical capacity among level 2 EV chargers, any Heat Pumps with the EVECTRIX associated smart touchpad/programmable thermostat, domestic hot-water (DHW) systems (both electric and HP versions), dryers, ranges, etc., ensuring safe and efficient operation while considering limited available capacity.

* TECHNICAL SPECIFICATIONS

- Supported Building Types : Detached houses, townhouses, MURBs/condos
- Max Units (Networked) : 250 per ILMS Harmony panel
- Controlled Loads : EV chargers, AC/Heat pumps, DHW tanks, Dryers.Stoves,Hot-tubs,Heaters
- Communication (for Multi-mode+ILMS) : Cat5/Cat 6
- Control System INPUT: 120VAC - 15A
- Control Voltage : 24 VDC 2A
- Working Temperature : -20°C to +40°C
- Storage Temperature : -20°C TO +40°C
- Input/Output: 4x40A 208/240 VAC + HeatPump LV Connectivity
- Enclosure Type: NEMA 3R
- Weight: 30 lbs

*Specifications are subject to change without prior notice.

WIRING SCHEMATICS



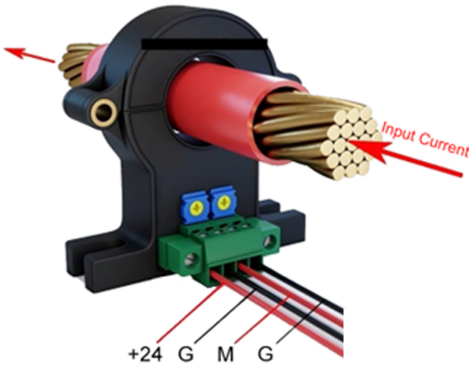
SYSTEM COMPONENTS

PACKAGE INCLUDED :

- 1 X Harmony Smart Panel
- 2 X Current Transformer (CT)
- 1 X EVECTRIX Smart Thermostat/Touchpanel

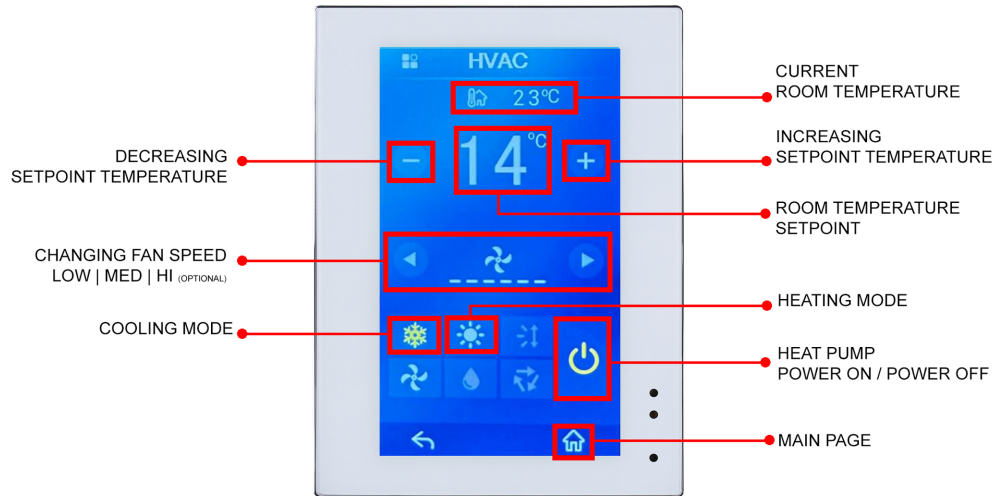


EVECTRIX SMART THERMOSTAT/TOUCHPANEL

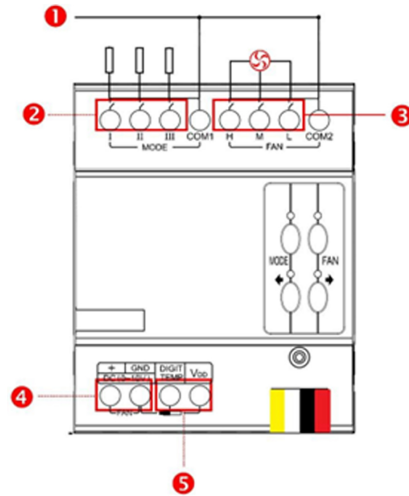


CURRENT TRANSFORMER (CT)
WITH 4-20 mA OUTPUT

SMART THERMOSTAT/TOUCHPANEL FUNCTIONALITY OVERVIEW



HEAT PUMP CONTROL WIRE CONNECTION



- 1 R WIRE – 24VAC POWER
- 2 HEAT PUMP MODE WIRE: I: O/B II: Y III: SECOND STAGE HEATING OR COOLING
- 3 INDOOR UNIT FAN TERMINAL 3 STAGE (DEFAULT HIGH SPEED)
- 4 OPTIONAL IN-DOOR UNIT FAN 0-10 V TERMINAL
- 5 OPTIONAL OUTDOOR TEMPERATURE DIGITAL SENSOR



PLEASE CONFIRM WITH THE HEAT PUMP MANUFACTURER ABOUT COMPATIBILITY WITH A THIRD-PARTY THERMOSTAT BEFORE MAKING ANY WIRING CONNECTIONS. ANY REQUIRED 3rd PARTY INTERFACE MUST BE PROVIDED, WIRED BY OTHERS AT THE FIELD.