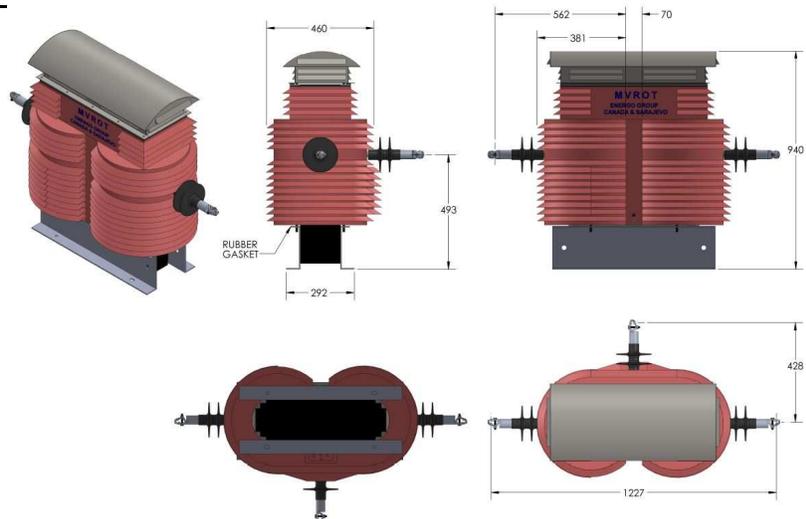


Technical Characteristics

Application	Reduce energy losses (by 60%) across power distribution grids. By <u>adapting</u> 3 phase power supply lines to more efficiently deliver energy to single phase loads this device (combining instrumentation and power transformer coils in a novel manner) reduces both the line loss (voltage drop) and heating inherent in transmitting electrical energy using metal transmission lines. Coincidentally, the sinusoidal wave carrying the energy is more stable with no harmonics being generated by device, such that “cleaner” energy is available for modern electronic loads. The key result is that a greater portion of generated electrical energy is actually delivered to paying customers over long distances using <u>existing</u> distribution grid infrastructure.
Height [mm]	940
Depth [mm]	460
Weight [kg]	870
Mechanical Protection	IP56/NEMA 3R
Ambient Temperature	-50 to +65
Primary Voltage [kV]	0.6 to 4.16
Secondary Voltage [kV]	0.11 to 2.5
Power: Sn [kVA]	up to 215
Power Factor: “COS”	0.97
Harmonics	N/A (Does not generate / pass through)
Nominal Power [kVA]	185
Frequency [Hz]	50 / 60
BIL [kV]	30
Insulation Degree [kV]	7.2/20
Power Losses [kW]	Total 1% of Pnom
Standards / Certified	IEC 60076-11 / 2004, EN 50160, NETA, C22.2 No. 47-13, IEEE C57.12.01 / 2015

	Metering PT	Control PT	Metering CT
Primary Voltage [kV]	4.16	4.16	4.16
Secondary Voltage [V]	120	120	-
Primary Current [A]	-	-	60
Secondary Current [A]	-	-	1 / 5
Class [%]	0.5%	3%	0.5%
Protection	3P	3P	-
Burden [VA]	100	300	10
BIL [kV]	30	30	30
Insulation Degree [kV]	7.2/20	7.2/20	7.2/20

Overall Dimensions





PRODUCT DESCRIPTION

EnergO Group's *Regulating and Optimizing Terminal* for Medium Voltage network adaptation, commonly known as the **MVROT**, is an energy loss reduction device that combines instrumentation and power transformer coils in a novel (patent pending) manner.

MVROTs are consequently poised to set a new standard of efficiency in the electrical power distribution industry, by enabling distribution network operators to collect payment for a greater portion of the valuable energy that distributors purchase from generators and transmit for delivery from its substations to their customers.

MVROTs, in both laboratory and field trials, typically reduce energy losses by 60%!

MVROTs are installed at an optimal location (determined by our engineering team based on distribution grid's specific's) in your distribution network, using EnergO Group's proprietary method of adapting two of the grid's 3 phase pairs to close the circuit of each branch supplying the energy to distributors customers.

MVROTs, when installed in accordance with EnergO Group's engineering and method, typically pay for themselves within very short period.

MVROTs have the unusual advantage of being designed with a replaceable core that permits rapid repair to reduce branch downtime and are easily retrofit directly into distributors existing network infrastructure to extend its life-cycle, typically by over 10 years.

MVROTs however also have the advantage of being forward compatible with SCADA and other modern SMART systems for monitoring & controlling your existing network.

MVROTs are available in different models all of which: reduce energy loss, improve voltage quality, and decrease "intermittence" in distributors network ... while also permitting you to monitor current, voltage, energy flow, and maximum loading conditions – without needing to connect expensive external metering devices to your network.

Advanced models of our MVROT are available with additional modules customized to distributors specific network data & operational needs both current and future. These units have the ability to rapidly identify downstream faults, locate those faults with GPS coordinates, and then report the detected condition and location requiring service to distribution control center. These units can also automatically control voltage regulators in the main substation.

SUMMARY OF KEY ATTRIBUTES

- reduce energy loss, to deliver more billable power to distributors customers
- reduce intermittence, to supply required energy more quickly to all loads
- reduce / eliminate network harmonics, to supply cleaner power for electronics
- better balance asymmetrical loads
- an ideal enhancement to existing SCADA controlled networks
- withstand extreme outdoor weather (snow or sun) conditions
- simple, rapid installation and reliable operation
- less expensive means to upgrade distributors grid to deliver more energy using existing infrastructure = typically 1/3rd the cost of traditional methods

ADDITIONAL INFORMATION

Please visit our website www.egcanada.ca for further information about EnergO Group Canada Inc. and its' products or contact sales at sales@egcanada.ca