







The Avtron Type ANG, Neutral Grounding Resistors are designed for applications when up to 800 Amps are required.

#### **FEATURES**

- Designed in Strict Accordance with IEEE Standard 32-1972
- Reliable, all Stainless Steel Helidyne Resistor Elements
- Corrosion Resistant Aluminized Steel Enclosures
- Elements are Triple Insulated from Ground for Added Safety
- Internal Bushings Eliminate the Need for Costly Elevating Stands
- Fully Factory Assembled -No Field Assembly Required

### Description

Avtron Neutral Grounding Resistors are designed to provide added safety to industrial distribution systems by limiting ground fault current to reasonable levels. In a typical solidly grounded four wire system, the neutral is tied directly to earth ground. This can cause high ground fault current (typically 10,000 to 20,000 amps) and excessive damage to transformers, generators, motors, wiring, and associated equipment. Inserting our neutral grounding resistor between neutral and ground, limits fault current to a safe level (typically 25 to 400 amps) while still allowing sufficient current flow to operate fault clearing relays. Limiting fault current also reduces the problem of transient overvoltages (up to six times normal voltage) which can occur during arcing type ground faults.

#### Construction

Resistor elements, terminals, support rods and exterior fasteners are made from stainless steel for added durability. Enclosures are manufactured from corrosion resistant aluminized steel finished with ASA-61 gray powder coat paint. Multi-lingual voltage warning signs are provided for increased safety. Forged lifting eyes are furnished for easy handling. Internal connection points eliminate conventional "live" external bushings and the need for expensive elevating stands or towers.

### **Technical Information**

Duty Cycle: 60 seconds or less Max. Temperature Rise: 760°C Typical Current: 100 to 800 Amps

# **Model ANG, Neutral Grounding Resistors**

## **Neutral Grounding Transformers**

Avtron Neutral Grounding Transformers provide high resistance grounding for medium voltage generators and transformers. The standard package consists of a single-phase, dry-type, Epoxycast™ transformer plus a secondary power resistor, mounted in a common enclosure.

## **Certified Products**

Avtron Neutral Grounding Resistors are designed, manufactured, and tested in strict accordance with IEEE Standard 32-1972 and are UL listed and certified (up to 1000 amps maximum).

#### **Optional Accessories**

Avtron Neutral Grounding Resistors can be supplied with open frame construction, for installation inside switchgear or similar enclosures, or fully assembled with indoor/outdoor safety enclosures. Options include:

- Current Transformers
- · Potential Transformers
- Disconnect Switches (oil or air insulated)
- · Stainless Steel Enclosures

# Documentation - Operating Manual

A comprehensive operator's manual is supplied electronically via a USB drive.

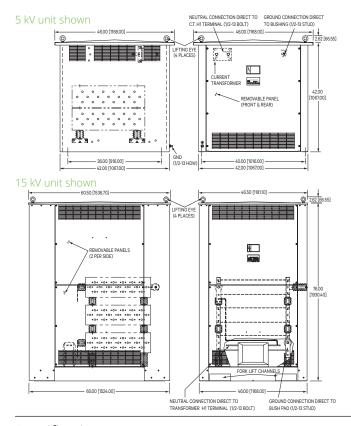
Sections include: Safety, Installation, Operation, Maintenance, and Troubleshooting.

## Testing and Standards

Avtron resistors comply with NEMA, NEC, and ANSI standards. Quality control system is certified to ISO9001 standards.

#### Two Year Warranty Included

The equipment is covered by an industry exclusive 24-month parts and labor warranty.



All dimensions are in inches [millimeters]. Specifications subject to change without notice.

# Specifications

Part Number	System Voltage	Line-To- Neutral Voltage	Initial Current Amps	Ohms ±10%	Length L	Width W	Height H	Approx. Weight
10 Second Ratings (760°C Temperature Rise)								
ANG14-1	2400	1390	100	13.9	42	42	42	400
ANG14-2	2400	1390	200	6.9	42	42	42	450
ANG14-4	2400	1390	400	3.4	42	42	42	450
ANG14-6	2400	1390	600	2.3	42	42	42	650
ANG24-1	4160	2400	100	24	42	42	42	450
ANG24-2	4160	2400	200	12	42	42	42	450
ANG24-4	4160	2400	400	6	42	42	42	450
ANG24-6	4160	2400	600	4	42	42	42	350
ANG24-8	4160	2400	800	3	42	42	42	400
ANG42-1	7200	4160	100	41.6	46	60	42	600
ANG42-2	7200	4160	200	20.8	46	60	42	650
ANG42-4	7200	4160	400	10.4	46	60	76	700
ANG72-1	12500	7200	100	76	46	60	76	900
ANG72-2	12500	7200	200	36	46	60	76	850
ANG72-4	12500	7200	400	18	46	60	76	1000
ANG76-1	13200	7620	100	76.2	46	60	76	900
ANG76-2	13200	7620	200	38.1	46	60	76	900
ANG76-4	13200	7620	400	19.05	46	60	76	1000
ANG80-1	13800	8000	100	80	46	60	42	650
ANG80-2	13800	8000	200	40	46	60	76	800
ANG80-4	13800	8000	400	20	46	60	76	900

**NOTE** Other voltage, current, and time ratings available. Please consult factory.