


Intellimeter CTs Specification and User Manual



 **intellimeter**
CANADA INC.
Innovative Metering Solutions

Intellimeter Current Transformers

CONTENTS

WARNING	3
1. Before Installation and removal of the current transformers:.....	3
DISCLAIMER	3
CUSTOMER SUPPORT	3
STATEMENT OF CALIBRATION	4
INSTALLATION DISCLAIMER.....	4
ELECTRICAL CODE.....	4
Introduction.....	5
1. Application	5
Specification.....	7
1. Electrical character	7
2. INT-CT401-NJ	8
3. INT-CT601-NJ	9

WARNING

Field electrical current transformer installers must follow proper safety precautions and all local electrical code requirements during current transformer installation. During normal operation of this device, hazardous voltages are present which can cause severe injury or death. We strongly recommended that only qualified, properly trained personnel should perform installation and servicing.

1. Before Installation or removal of the current transformers:

- To reduce the risk of electric shock, always open or disconnect the circuit from the power-distribution system (or service) of the building before installing or servicing current transformers.
- Always use a property-rated, voltage sensing device to confirm that all power is off.
- Do not exceed the device's rating for maximum limits.
- The current transformers/rails may not be installed in equipment where they exceed 75 percent of the wiring space of any cross-sectional area within the equipment.
- The current transformers/rails shall not be installed in an area where it would block ventilation openings.
- The current transformers/rails shall not be installed in the area of the breaker's arc venting.
- Intellimeter current transformers/rails wiring are not suitable for Class 2 wiring methods nor installed for the communication or signal wiring.
- The current transformers/rails shall be secured and the leads routed so that they do not directly contact live terminals or bus.

DISCLAIMER

The information presented in this publication is carefully checked; however, Intellimeter Canada Inc. assumes no responsibility for inaccuracies. The information provided in this document is subject to change without notice.

CUSTOMER SUPPORT

To report any defect, please contact Intellimeter at 905.839.9199. Prior to returning any merchandise to Intellimeter, a return material authorization (RMA) number is required from Intellimeter.

STATEMENT OF CALIBRATION

The accuracy and calibration of our instruments are traceable to Measurement Canada, a division of Industry Canada.

INSTALLATION DISCLAIMER

INTELLIMETER does not accept any responsibility and will not be liable for any loss or damage or expense of any kind whatsoever and howsoever caused by improper installation of its products, be it indirect, special, incidental or consequential damages (including but not limited to damages for loss of business, loss of profits, interruption or the like). Please refer to Intellimeter Terms and Conditions of Sale available at <https://intellimeter.com/pages/terms-of-service-privacy-statement>

ELECTRICAL CODE

The installer is responsible to follow all safety and local electrical codes.

MANUFACTURER

Intellimeter Canada Inc. 1125 Squires Beach Rd., Pickering, Ontario, Canada and Nanjing UP E-tech Co., Ltd, 3284777 (Party Site), 55 Runli Road, C10-4. Lishui District, Nanjing, Jiangsu 211200, P.R. China, are the listed manufacturers for these current transformers.

These current transformers are a product made exclusively for Intellimeter and are sold only by Intellimeter Canada Inc. Installation manuals are included with all shipped products by Intellimeter Canada Inc.

Introduction

1. Application

Intellimeter current transformers are open-type accessory current transformers intended for installation within distribution and control equipment such as panel boards, switchboards, industrial control equipment, and energy monitoring/management equipment. The equipment is permanently connected (via wire leads), for installation into a suitable environmental enclosure. Electrical distributors and contractors use these for their industrial and commercial clients that require high accuracy class current transformers for their service metering.

Intellimeter mA series of Current Transformers are designed to accuracy class 0.3 Measurement Canada has approved them as Revenue Grade mA current transformers and UL listed current transformers.

INT-CT401-NJ and INT-CT601-NJ are single Current Transformers with maximum 30m or 100ft long leads. Fig. 1 is a typical application of Current Transformers.

Use of CTs

- Review general information and wiring diagram.
- Carefully read all the WARNING signs and notes. If the equipment is used in a manner not specified by INTELLIMETER, the protection provided by the equipment may be impaired.
- Install the current transformers polarity correctly according to the wiring diagram.
- Do not leave the secondary current transformers open when current is flowing through the primary circuit even Intellimeter mA current transformers with open-circuit protection.
- Contact Intellimeter if there has been a change made to the layout or if the assigned drawings do not match the actual distribution panel layout.

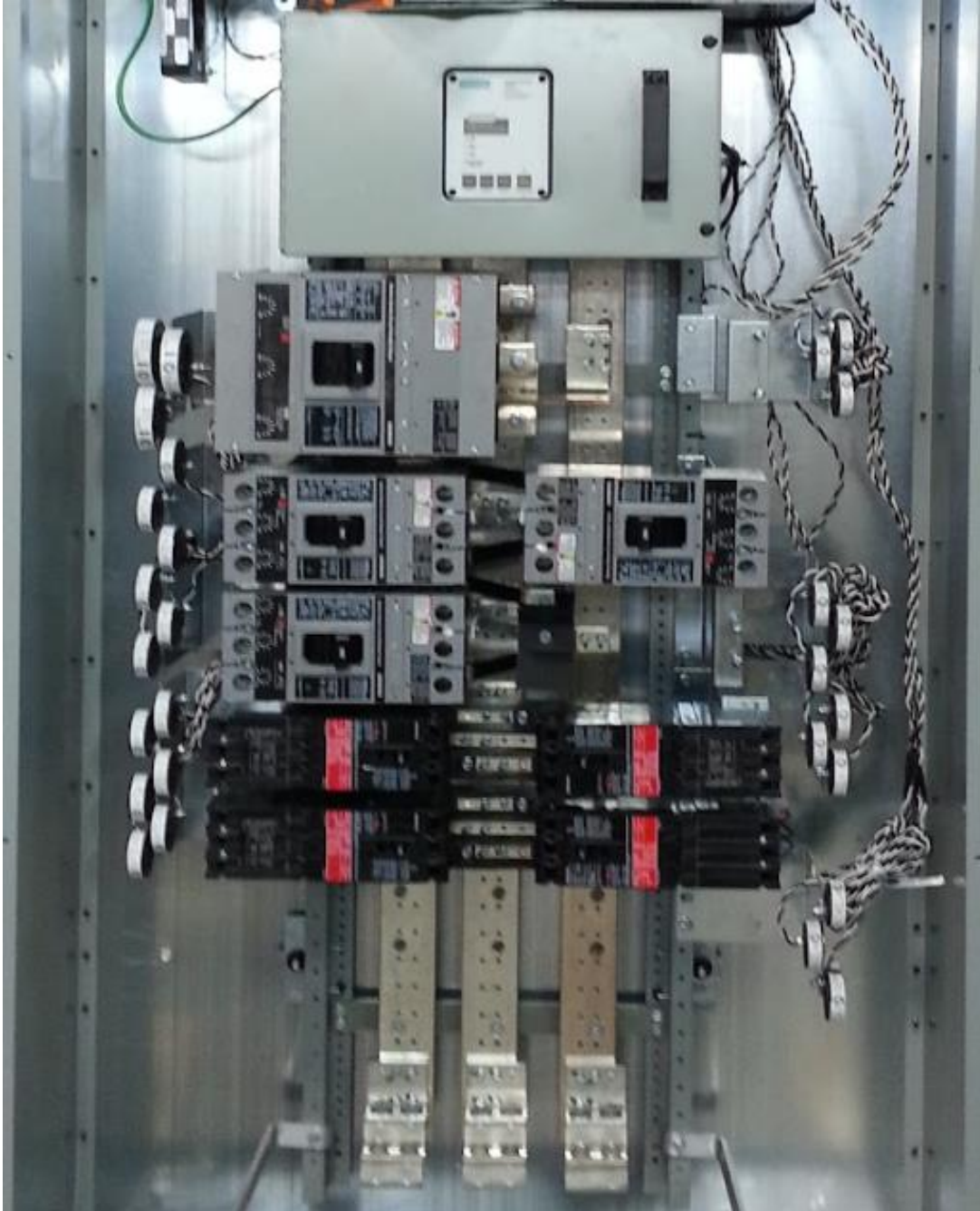


Fig.1 Typical CTs application

Specification

1. Electrical character

Model No.		INT-CT401-NJ	INT-CT601-NJ
Max current	Primary (A)	400	600
	Secondary (A)	0.1	0.1
Accuracy Class		0.3	0.3
Standard Burden		B0.005	B0.005
Frequency		50/60Hz	50/60Hz
Voltage Class (VAC)		600	600
Overvoltage		CAT IV	CAT IV
Insulation Type		Double	Double
Ambient Rating		18 to 28°C	18 to 28°C
Indoor or Outdoor		Indoor	Indoor
Altitude		<5000m	<5000m
Operating temperature		-40 to +60°C	-40 to +60°C
Humidity tolerance		0-95%	0-95%
Pollution Degree		PD 3	PD 3

2. INT-CT401-NJ

It is a single-current transformer with a maximum 400A primary current, see the model designation below.

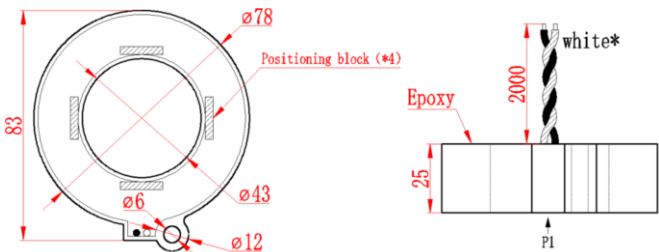
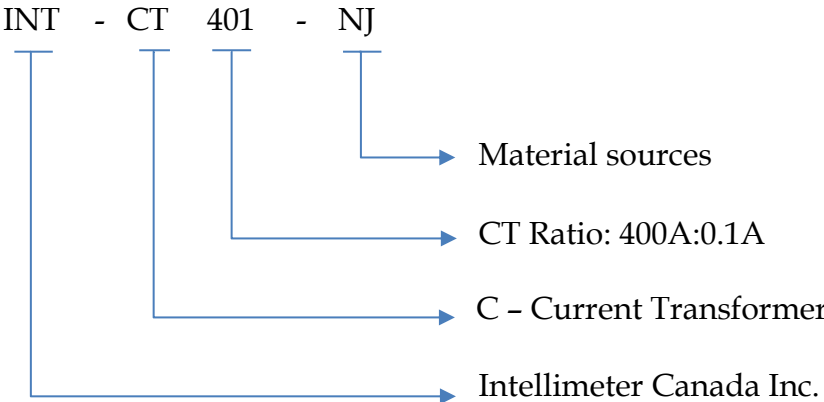


Fig. 2 INT-CT401-NJ

3. INT-CT601-NJ

It is a single-current transformer with a maximum of 600A primary current, see the model designation below.

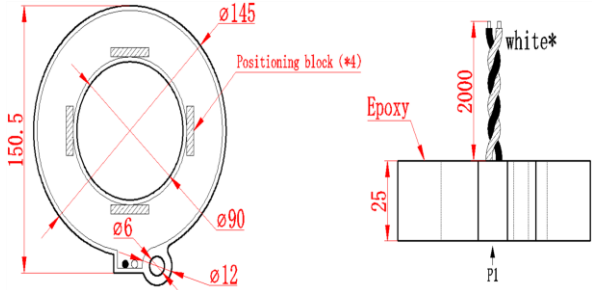
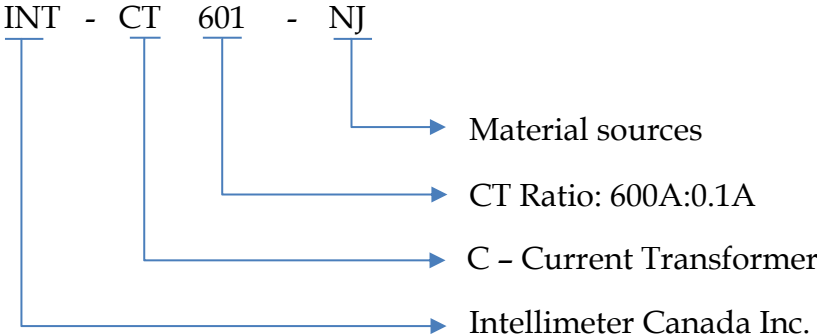


Fig.3 INT-CT601-NJ