

ICCDxx Integral Cycle Thermal Load Drive

The ICCDxx line employs thyristor switches to drive thermal loads with complete cycles minimizing supply and load line disturbances and noise.



ICCD60 Integral Cycle Control Drive

They interface with most (if not all) automation equipment in the market and are an effective thermal load drive in many applications. They are all fully protected, digitally-controlled and programmable units.

They are simple to install and are effectively employed in applications driving:

- All types of resistive and inductive heaters,
- Ovens, and
- Boilers.

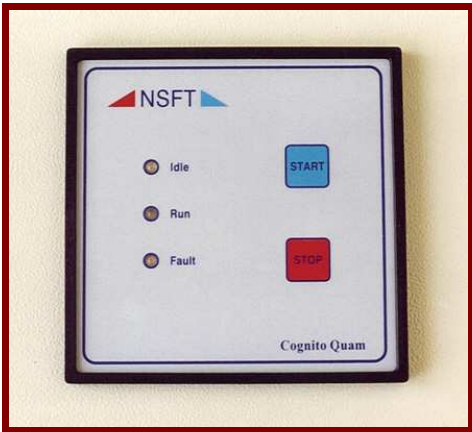
ICCDxx Features	
Low noise integral cycle thyristor control	Only complete cycles are conducted to the load, thus eliminating all di/dt and dV/dt caused interference.
Power circuit	3-phase, 15-75 A/phase. The employed 1600 VDC power circuit allows use in up to 3x480 VAC systems.
All types of load connection	Drives both, Wye/Star and Mesh/Delta connected loads.
Complete electronic protection	Overcurrent, undercurrent, overvoltage, undervoltage, against noise, faults and disturbances in the supply, phase integrity, internal temperature.
Interface	Versatile two input user/control interface.
Isolated bit outputs	"Idle", "Run", "Load Fault", "Fault". Galvanically isolated.
Small power 24 V supply	To power a local sensor or other automation device.
Enclosure	Installation-friendly, robust, space-saving "bookcase" style.

ICCDxx characteristics at 3x400 VAC			
Model	Power, kVA	Current, A/phase	Maximum heat dissipation, W
ICCD15	10	15	61
ICCD30	20	30	109
ICCD45	30	45	150
ICCD60	40	60	202
ICCD75	50	75	252

Units above 75 A are produced on a per order, custom base.

NSFT/ICCD Panel Controller

The NSFT/ICCD Panel Controller gives local and distributed control capabilities to the ICCDxx thermal load drive and extends its power resolution by extending the available PWM integration period without introducing any further subharmonic disturbances to the line.



NSFT/ICCD Panel Controller

The NSFT/ICCD controller features:

- Standard panel mounting enclosure (DIN 43700) with an IP54 polyester membrane face,
- Two user tactile switches on the front panel,
- Three status indicating LEDs,
- Comprehensive signal and power connections with the ICCDxx hardware, and
- Optional Quamatic, Modbus or similar network connectivity.

The four ICCDxx hardware bit state outputs ("Idle-Run-Load_Fault-Fault") are repeated, galvanically isolated, for further processing by any local automation devices.

Ordering Information	
Model	Description
ICCD15	15 A/phase Integral Cycle Control Drive for thermal loads
ICCD30	30 A/phase Integral Cycle Control Drive for thermal loads
ICCD45	45 A/phase Integral Cycle Control Drive for thermal loads
ICCD60	60 A/phase Integral Cycle Control Drive for thermal loads
ICCD75	75 A/phase Integral Cycle Control Drive for thermal loads
NSFTQ-L	NSFT/ICCD Panel Controller, local control only.
NSFTQ-N	NSFT/ICCD Panel Controller, local and network control.
XFR400230	Control Voltage Supply Transformer, 90VA, 400/230 VAC

Supplied by