

## **Which iVAC Pro Modules do I need?**

5 Nov 2014

### **iVAC, Automated Dust Control for your Health , Safety and Convenience.**

The 'iVAC Pro System' has been designed so that you can interface your power tools with your dust collector and have a fully automated system.

There are three main modules; the 'iVAC Pro Tool' interfaces your power tools to the system and the 'iVAC Pro Switch' interfaces your dust collector to the system. The 'iVAC Pro Blast Gate' physically interfaces the dust port of the power tool to the dust collection system..

You need to select the 'iVAC Pro Modules' that meet the needs of your individual power tools and dust collector.

### **Power Tools**

In Q4 of 2014 the 'iVAC Pro Tool Plus' will become available and as such will replace the original 'iVAC Pro Tool' units. (T115XXNA, T24020NA.).

The 'iVAC Pro Tool Plus' will interface most power tools where the device can be clamped around an unshielded power cord to the power tool.

### **'iVAC Pro Tool Plus' ('Tool Plus')**

The 'Tool Plus' unit is used to identify the powered state of its associated power tool.

The 'Tool Plus' is physically clamped to the power cord of the power tool.

The method of detecting the status of the power tool is by means of sensing the magnetic field around the power cord when the power tool is turned on or off.

Since this method of detection is purely magnetic the 'Tool Plus' unit can be used on any supply voltage to the power tool.

The 'iVAC Pro Tool HP' will be maintained for 3phase power situations that use shielded power cables.

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The following section applies to the original 'iVAC Pro Tool' modules that are scheduled to be phased out in Q1 2015.

### ***Selecting the iVAC Pro Tool.***

*Most Power Tools will have a specification label, indicating the operating voltage and running current.*

*The only limitation with respect to the iVAC Pro Tools T11515NA, T11520NA and T24020NA is the level of the current as set by the circuit breakers on the modules, which is either 15Amps or 20 Amps.*

*When a power tool is turned on there is an initial surge in current that can be five to seven times the running current and dependant on the duration of this surge, this may trip the circuit breaker.*

*This value and duration of surge current is a function of many aspects and therefore will vary from machine to machine. It is a function of motor speed, line voltage and the type of tool; therefore the following information is based on field experience with iVAC Pro products.*

### ***115Vac Power Tools***

*For 115Vac power tools it is recommended that you use the T11520NA (115Vac 20Amp.) module whenever possible. The output receptacle on this module accepts either 115V 15Amp or 115V 20Amp plugs. It can power tools up to 1.5HP.*

*This iVAC unit has a 20 amp plug so you will need a 20Amp circuit and receptacle for it.*

*For workshops that have already been wired with 115V 15Amp service, the T11515NA (115Vac 15Amp) module can be used. It can power tools up to 1HP.*

### ***230Vac Power Tools.***

*The T24020NA (240Vac 20Amp) module can power tools up to 3HP.*

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### **230Vac Power Tools rated at > 20Amps**

For power tools that are either rated at greater than 20Amps or have high start up surge currents, the

iVAC Pro Tool HP or the 'Tool Plus' is required. These modules sense the current with a magnetic probe and therefore is not limited by the maximum level of current.

### **3Phase AC Mains power**

For power tools operating from three phase AC mains power the 'iVAC Pro Tool HP' or the 'Tool Plus' is required. These modules are not voltage or current sensitive.

<b>Volts AC</b>	<b>Running Current Amps</b>	<b>Horse Power</b>	<b>iVAC Pro Module</b>
115	10	1	'Tool Plus' or T11515NA
115	15	1.5	'Tool Plus' or T11520NA
230	15	3	'Tool Plus' or T24020NA
230	>15	>3	'Tool Plus' or Tool HP
XXX	3 Phase	<10	'Tool Plus' or Tool HP
XXX	> 0.5Amps	1	'Tool Plus'

### **Dust Collectors**

#### **Selecting the 'iVAC Pro Switch'.**

The main characteristic that has to be considered when selecting the control of the dust collector is associated with the start up surge current.

In the 'iVAC Pro Switch' units, the output is switched by means of a relay. The maximum current that can be switched is 40Amps. This limits the size of the dust collector to 1HP at 115Vac and 2HP at 230Vac.

#### **Dust Collectors 115Vac 1HP**

Shop Vacs (5Peak HP or less) and Dust Collectors up to 1HP can be powered from the 'S11515NA'. (115Vac 15Amp) or 'S11520NA' (115Vac 20Amp).

### **Dust Collectors 115Vac 1.5HP**

Dust Collectors at 1.5HP or greater, as a result of the high start up current, need to be powered through an iVAC Contactor which in turn is controlled by a 'S115XXNA'.

### **Dust Collectors 230Vac 2.0HP**

These dust collectors can be controlled directly from an 'S24020NA' (240Vac 20Amp).

### **Dust Collectors Greater than 2.0HP and up to 10HP**

These dust collectors can be controlled through an iVAC Contactor which in turn is controlled by a 'S115XXNA'.

<b>Voltage</b>	<b>Horse power</b>	<b>iVAC Pro Modules</b>
115	Up to 1HP	S11515NA
115	1.5HP	S11515NA + iVAC Contactor
230	Up to 2 HP	S24020NA
230	>2 HP	S11515 + iVAC Contactor
XXX	<10HP. Single or 3 Phase	S11515 + iVAC Contactor

### **iVAC Pro Blast Gates.**

The iVAC Pro Blast Gates come in 4" and 6" sizes in order to match with the ducting of your dust collection system. The Blast Gates are powered from a standard 115Vac to 12Vac AC Adaptor.

The control is by means of a digital rf signal from the iVAC Pro Tool.