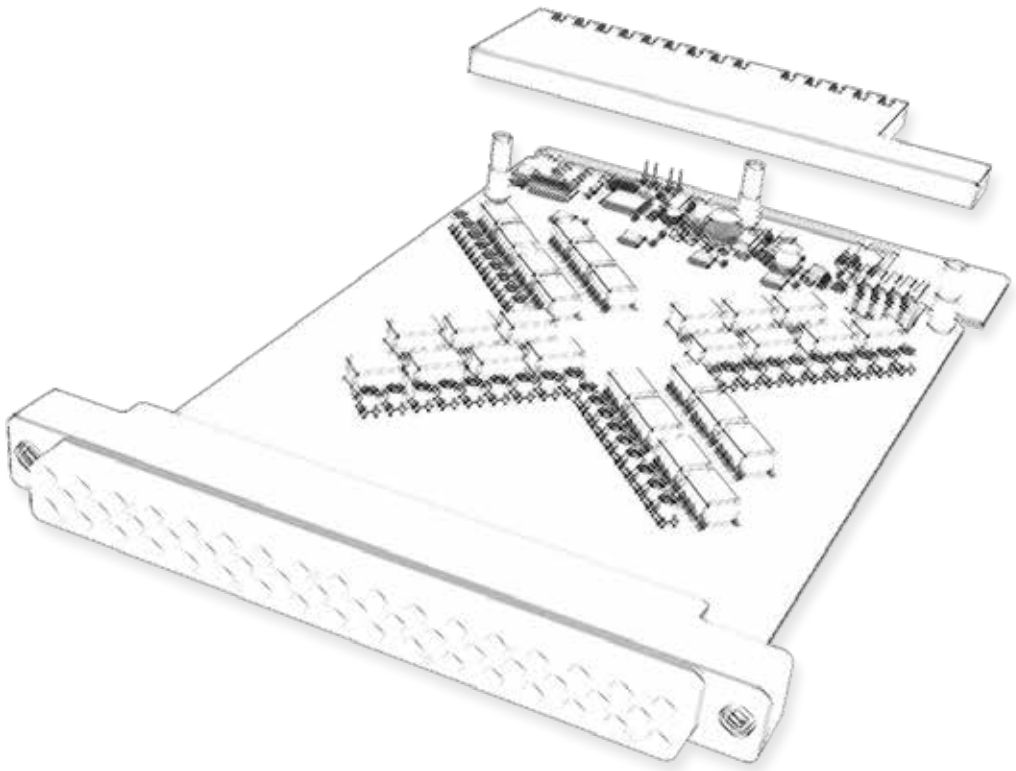
DESIGNED FOR TEST
PART OF MG-PRODUCTS

6TL

YAVModules



fastATE® Technology

Sistel Group

DESIGNED FOR TEST
PART OF MG-PRODUCTS

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About FastATE:

All **YAV**Modules are part of 6TL's innovative FastATE Concept. This concept allows engineers to build up their ATE (Automatic Test Equipment) systems up to 70% faster. Each FastATE module from 6TL, is solving a typical recurring engineering task that the test engineer would face when designing the ATE from scratch.
Besides that, FastATE is offering many handy features and tools that resolve typical ATE design issues.
By using the 6TL FastATE concept it will not only be reduced the development time of the ATE, but it will also be greatly improved the quality of the final system.
FastATE is a concept developed by ATE engineers for ATE engineers to help them focus on the things that matter in the design of their ATE solution. For more information visit www.FastATE.info

1. Product philosophy

The YAV modules format

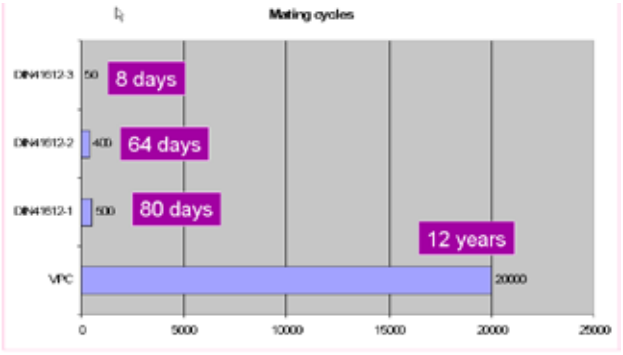
All YAV modules from 6TL Engineering are matching the most widely used mass interconnect (MIC) systems from Virginia Panel Corporation, the VPC 90 Series. They can be easily and directly mounted into any VPC MIC receiver. It is as easy and fast as mounting a standard VPC 90 series connector module. Our Form E* modules fit both the VPC MIC receiver and ITA on the fixture.

(*) See chapter 22 to learn about YAV modules Form factors

Why to use a High Quality Connector and Receiver?

In general each universal test platform needs a universal interface to be able to fit multiple test fixtures and products to be tested. This results in many mating and un-mating cycles. When only one pin of the interface between instrument and Device Under Test (DUT) is not working your whole test system is no longer working, resulting in unwanted down-time of your sophisticated test system and even worse, your production.

Typical instrument connectors are rated from 25 to 200 mating cycles, this results very quickly in unwanted connecting failures. The 6TL Engineering YAV Modules are using standard MIC receiver modules from Virginia Panel Corporation (VPC) who are rated for 20.000 cycles without signal loss, providing a very reliable connection between your test platform and each test fixture. Our YAV technology therfore is much more durable than any other compatible instrument or switch.



2 shifts / 3 changes of fixture per shift= 6 changes per day

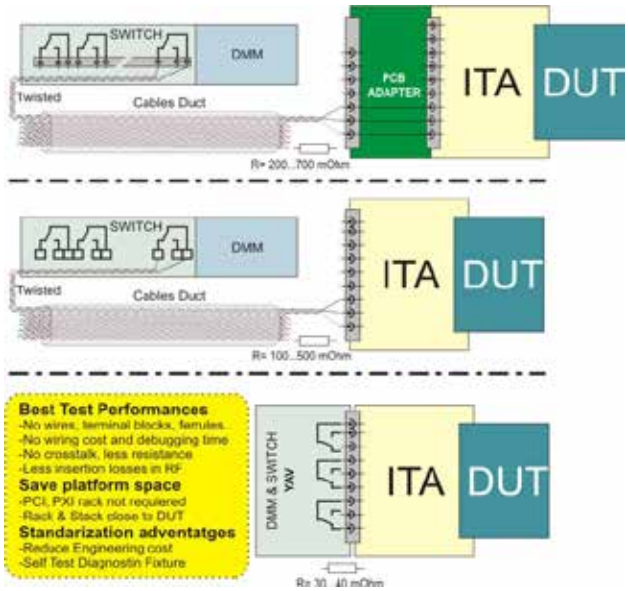
Why to integrate instruments as close as possible to the DUT?

One disadvantage of using a MIC system has always been the additional cabling needed between the instrumentation and MIC modules. The longer the wires and the more connectors used between the DUT and the stimulus/response instruments, the more the integration cost rise and the signal integrity falls.

The 6TL YAV Modules do not need cables between the instrument and MIC receiver. This results in a much better signal integrity due to minimized cable length between instruments, switching and DUT.

Other advantages are:

- Less signal distortion
- More accurate measurements.
- Less engineering effort and large wiring cost reduction
- Fixtures standarization.
- Maintenance cost reduction, easy calibration and repair
- Simplified wiring diagrams and documentation



Wide range of functions and Fully Open!

The 6TL Engineering YAV Modules cover a wide range of basic functionality, often enough to build a base functional test system. The concept is open and can be integrated with all kind of test technologies or device buses. From GPIB, CAN bus, Ethernet, RS485 or USB. The percentage of YAV Modules in a functional test solution can be small or large, depending on your specifications and budget.

Over all, every YAV or other 6TL Module will contribute to a more efficient, cost efective and reliable test solution with less engineering effort for your own engineers in designing base functionality for your test solution, resulting in more efficient usage of your own engineering process who can now fully focus on the application development.

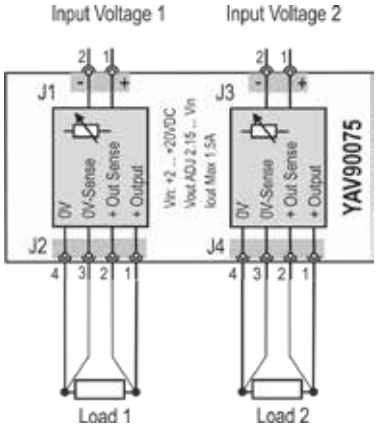
2. Power Supplies

YAV90075

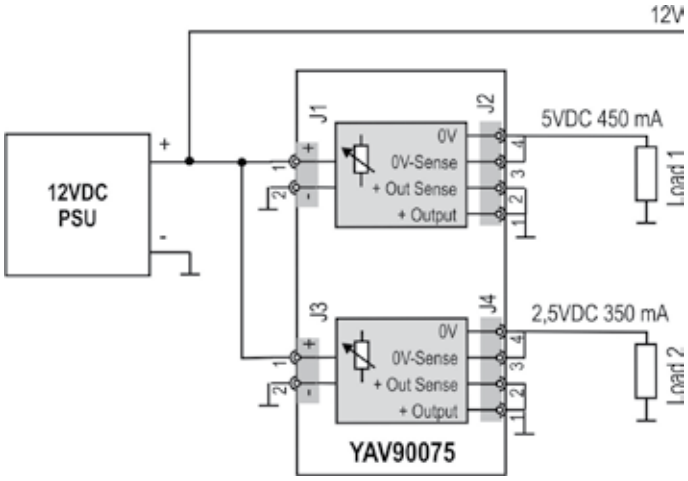
6200.75

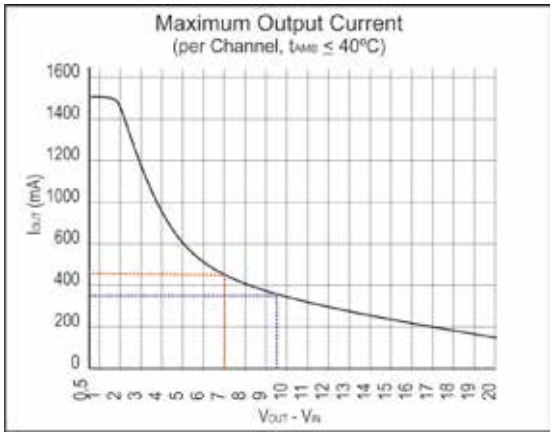
Dual_LDO Regulator Module 2.7V to 20V Input

- Adjustable out from 1,21 to 20 V
- Output current up to 1,5 A
- Low noise : 40µVRMS
- Dropout voltage <340mV
- Thermal limiting
- Form E



Application example





3. Switches, Multiplexers and Matrix

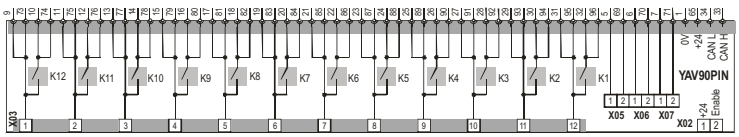
High Current

YAV90PIN

6200.18

12-Channel High-Power General-Purpose Relay Switch

- 12 Independent SPST relays
- 8A switching / 250V_{AC}
- Back connections block
- General inhibit input
- 6x Sense connections
- CAN Bus controlled
- Form A

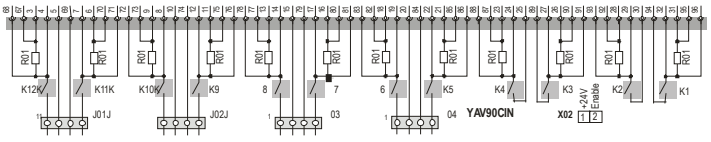


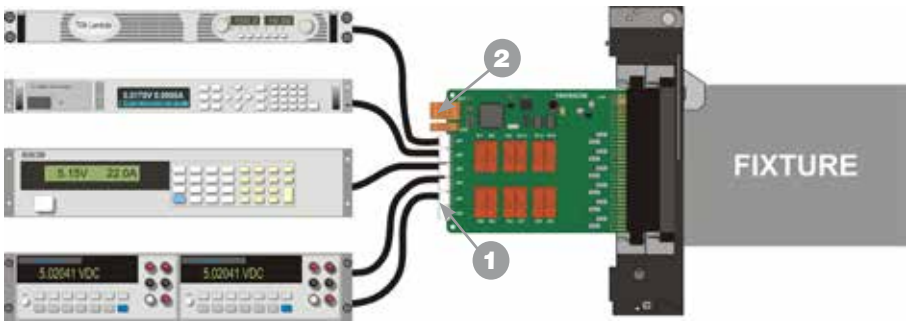
YAV90CIN

6200.08

12-Channel High-Power General-Purpose Relay Switch with Meas. Shunts

- 12 Independent SPST relays
- 8A switching / 250V_{AC}
- 4x Back connectors
- General inhibit input
- 12x Current Meas. channels
- 8x Sense connections
- CAN bus controlled
- Form A





YAV90CIN:

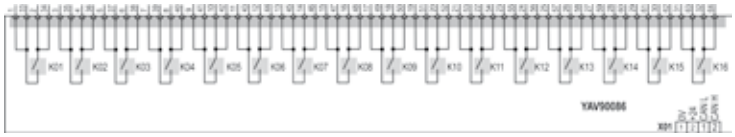
1. Direct connection from the power supplies to the fixture thanks to the YAVModule back connector.
2. Direct integration with your ATE's EPO function (Emergency Power Off) thanks to inhibit function

YAV90086

6200.86

16-Ch Power relays 10A 277V_{AC}

- 16 independent SPST relays
- 16A switching at 125V_{AC} //10A switching at 277V_{AC}
- 2770 VA switching power
- CAN bus controlled
- Form G

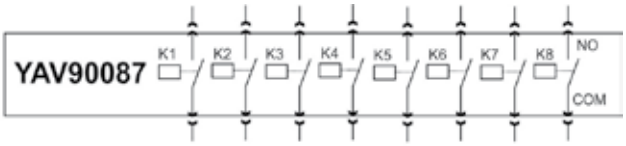


YAV90087

6200.87

8-Ch Power Relays 20A 250V_{AC}

- Sze (WxD): 75x154mm
- Free configuration with Faston terminals as scanner or matrix
- LED indicator of active relay
- PNP outputs control or CAN bus controlled with YAV90304

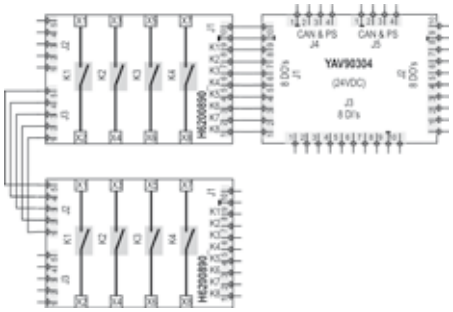


YAV90089

6200.89

4-SPST 40A Power Relays

- 4xSPST 40A 250$V_{AC/DC}$
- 24V_{DC} operation voltage
- YAV90304 CAN bus control
- Form H



In the above example, 2x YAV90089 modules are assembled together and controlled through a YAV90304 (CAN I/O module)

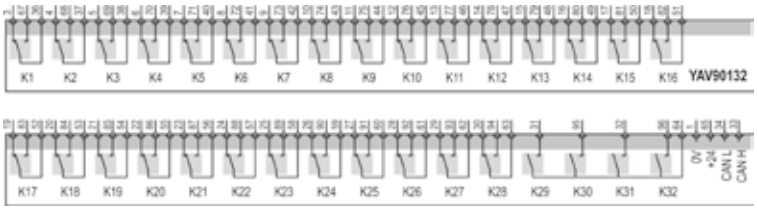
3.1. Switches

YAV90132

6200.21

32-Channel, 5A relays

- 28 SPDT relays
- Mux- 1x 4 SPST relays
- 5A / 240V_{AC}
- Max. switching 1250 VA
- CAN bus controlled
- Form A

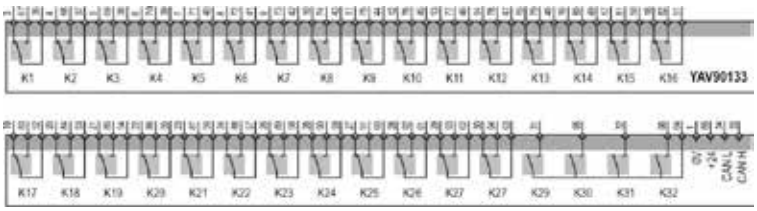


YAV90133

6200.82

32-Channel, Low signal

- 28 SPDT relays
- Mux- 1x 4 SPST relays
- 2A / 240V_{AC}
- Max. switching 1250 VA
- CAN bus controlled
- Form A

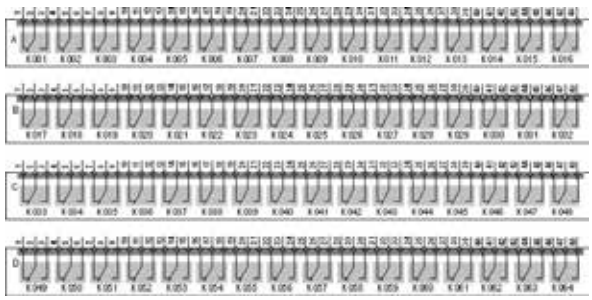


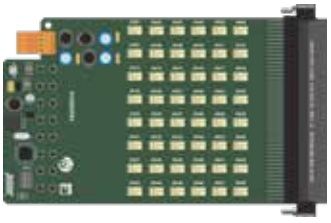
YAV90164

6200.06

64-Channel, 2A relays

- 64 SPDT relays
- Mux- 1x 4 SPST relays
- 2A / 250V_{AC}
- Max. switching 62,5 VA
- CAN bus controlled
- Form L



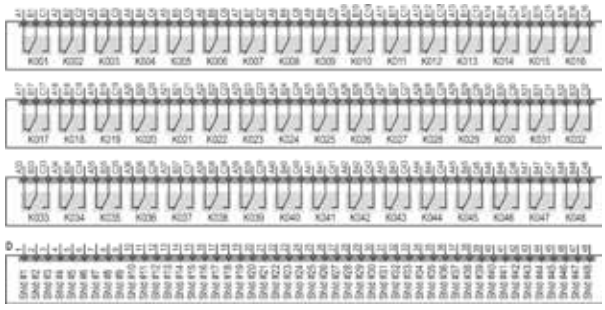


YAV91074

6200.74

48-Channel 2A Shielded SPDT relays

- 48 low noise relays
- 1A/100V_{AC}
- Max. switching 62,5 VA
- CAN bus controlled
- Form L

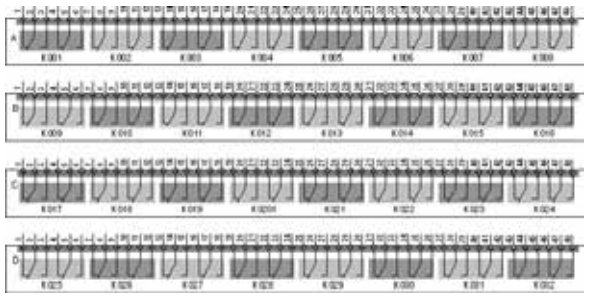


YAV90061

6200.61

32-Channel, 2A relays

- 32 DPDT relays
- 2A / 250V_{AC}
- Max. switching 62,5 VA
- CAN bus controlled
- Form L

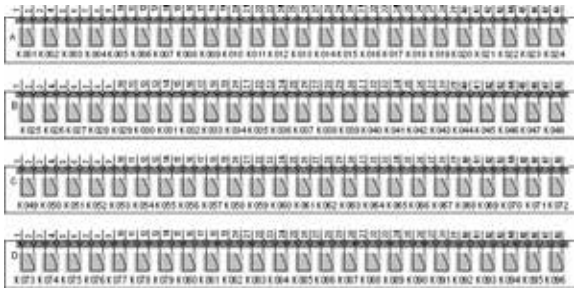


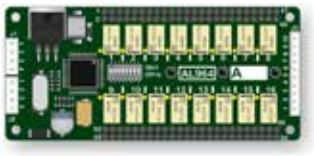
YAV90064

6200.64

96-Channel, 2A SPST

- 96 SPST relays
- 2A / 250V_{AC}
- Max. switching 62,5 VA
- CAN bus controlled
- Form L





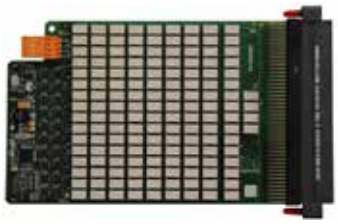
YAVAL964

AL964

16x DPDT CAN Contr. relays

- Small size (WxD): 100x45mm
- 16 channels DPDT 2A
- CAN bus control and 24V_{DC} (J1 and J2 connectors to chain multiple cards).
- Access to Relay-pins through wire-wrap Pin Header.
- Relays number Pin Location printed on PCB so that operator can connect easily
- Address selection DIP Switch on top layer.
- LED led monitoring

3.2. Matrix



YAV90060

6200.60

2(4x16) Channel (2-Wire 2-Amp) Matrix

- 2A 250V_{AC} Switching
- 148 DPST relays
- Software configurable
- Form F

YAV90069

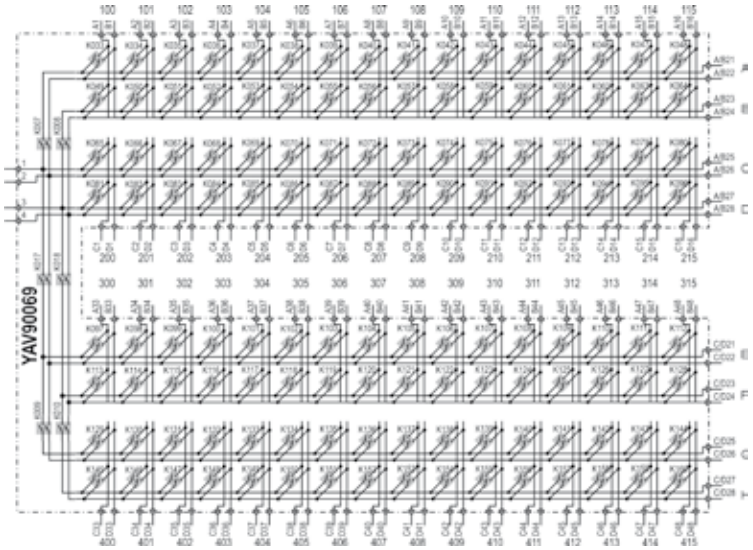
6200.69

64x2 Crosspoints (2-Wire 2-Amp) expandable Matrix

- Software configurable for:

1(64x2), 2(32x2), 1(16x2)+3(16x2)

- 2A 250V
- 62.5 VA Max. switching
- CAN bus controlled
- Form L

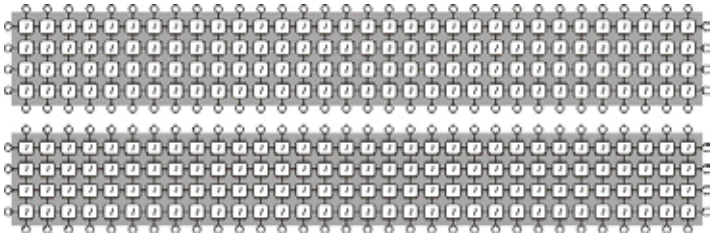


YAV90062

6200.62

256-crosspoint matrix

- Expandable matrix
- Multi configurable for:
- 1-Pole 4x64
- 2-Poles 4x32
- 256 SPST relays
- 0,5A/200V Max AC/DC peak Res.
- Max. switching 10 W
- CAN bus controlled
- Form L

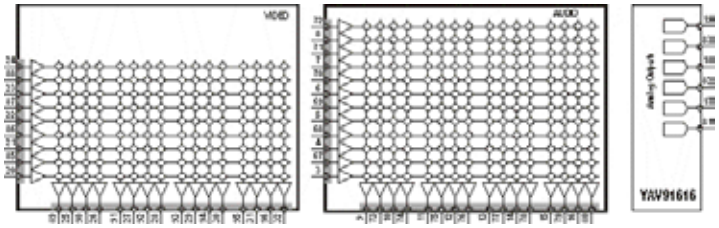


YAV91616

6200.35

Dual static HF matrix

- 9x16 Chn's video matrix
- 12x16 Chn's audio matrix
- 6x Analog Outputs
- CAN bus controlled
- Form A



YAV90120

6200.79

4x30 3- Amp 1- Wire Matrix

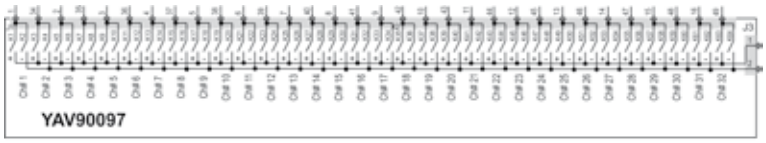
- 2A carry current / 250V_{AC}
- 120 SPST Relays
- Max. switching 62,5 VA
- CAN bus controlled
- Form L

YAV90097

6200.97

1500V 64-cross points Matrix (2x32)

- 32-Lines selectable High-Open-Low connection
- 3kV 1,0A Relays (Cool connection)
- Hipot test capabilities
- CAN bus controlled



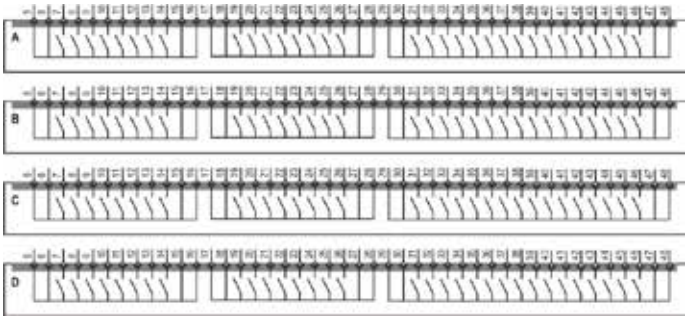
3.3. Multiplexers

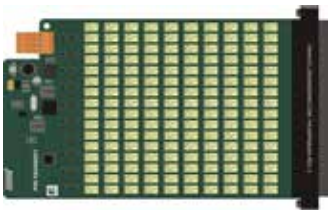
YAV90128

6200.27

128-Channel Multiconfiguration Multiplexer/Matrix Switch

- 128 SPST relays ITA Config.
- 250 mA / 100$V_{AC/DC}$
- CAN bus controlled
- Form B



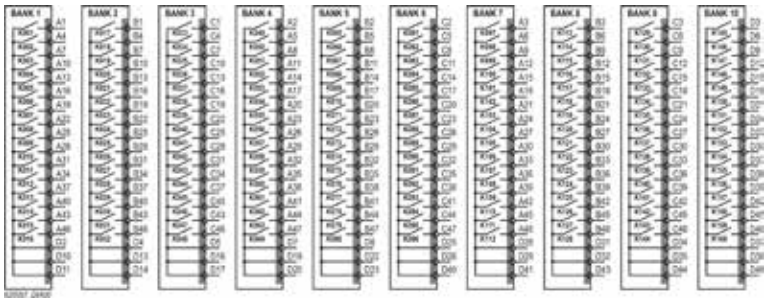


YAV90057

6200.57

160-Channel, 2A Relay Multiconfiguration Multiplexer/Matrix Switch

- 2A carry current / 250V_{AC}
- 160 SPST Relays
- Max. switching 62,5 VA
- CAN bus controlled
- Form L

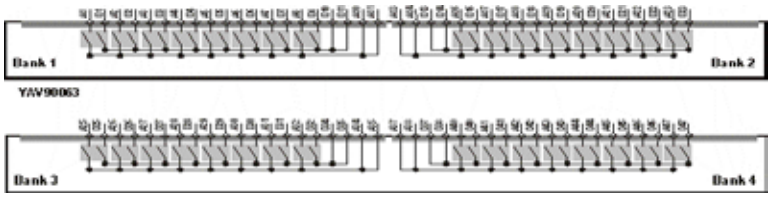


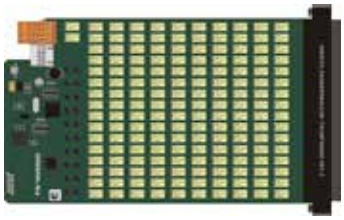
YAV90063

6200.63

4x 8x 5A Double Pole Mux

- 4 banks of 8 relays
- 5A 250VAC Switching current
- 32 DPST Relays
- Max. switching 62,5 VA
- CAN bus controlled
- Form G



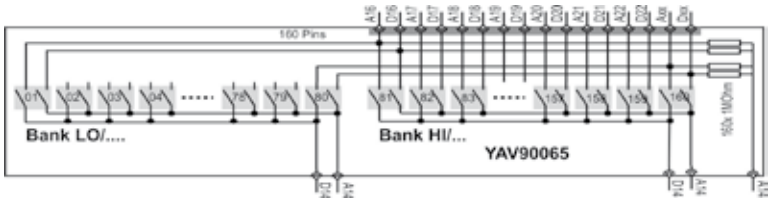


YAV90065

6200.65

160-Channel, Fault Intertion unit

- 2A carry current / 250V_{AC}
- 160 DPST Relays
- Max. switching 62,5 VA
- CAN bus controlled
- Form L

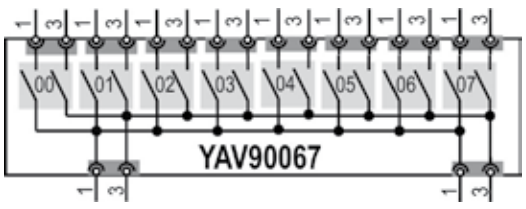


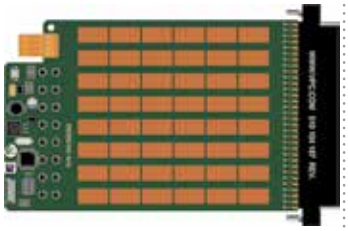
YAV90067

6200.67

1 to 8 High voltage Multiplexer

- 1000V 0.1A Two poles
- Form E





YAV90088

6200.88

48 Relays 4x (1 to 4) & 4x (1 to 8)

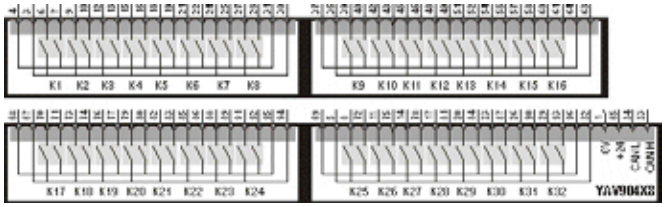
- Switching up to 250 VA
- Carry current up to 6A
- CAN bus controlled
- Form L

YAV904X8

6200.20

32-Channel (2-Wire) Multiconfiguration Multiplexer/Matrix Switch

- 2A carry current / 125V_{AC}
- CAN bus controlled
- Form A

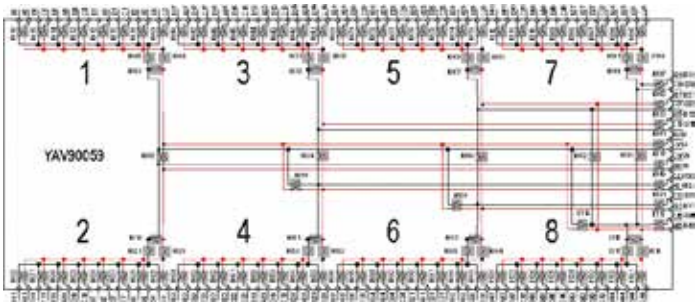


YAV90059

6200.59

64-Channel (2-Wire 2-Amp) Multiconfiguration Multiplexer

- 8 Banks 16 128-Channel 1 Pole
- 8 Banks 8 64-Channel 2 Poles
- 104 DPST relays
- 2A / 250V_{AC}
- Max. switching 62,5 VA
- CAN bus controlled
- Form L

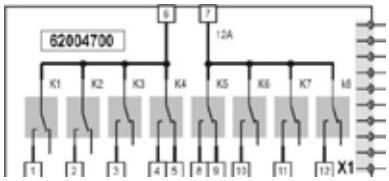


H62004700

6200.47

8-Channel High-Power General-Pourpose Relay Switch

- 8x SPST 24V_{DC} relays
- 12A switching / 250V_{AC}
- 2 trees x4 SPST relays
- Form F

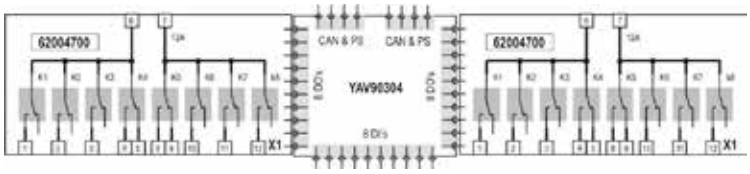


H620047C2

6200.47

16-Channel High-Power General-Pourpose Relay Switch

- 4 trees x4 SPST 24V_{DC} relais
- 12A switching / 250V_{AC}
- YAV90304 CAN bus control
- Form H

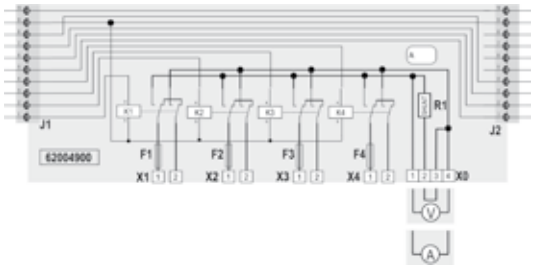


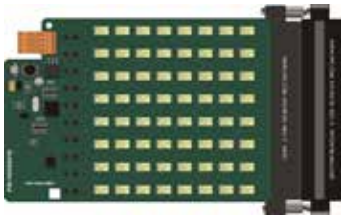
H62004900

6200.49

4-Channel Current measurement Mux

- Up to 10A 250V_{AC}
- 10 mΩ Measurement Shunt
- Controlled via YAV90304
- Form F



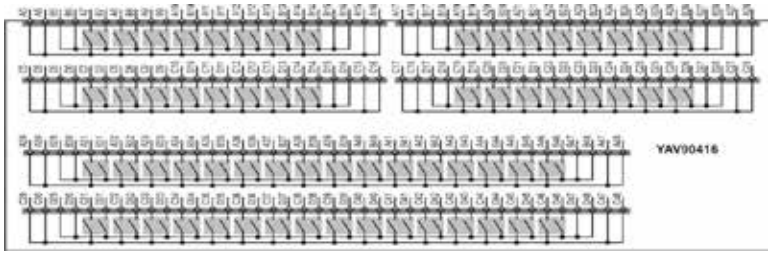


YAV90416

6200.05

64-Channel (2 Wire) Multiconf. Multiplexer

- Switching up to 60W
- Carry current up to 2A
- CAN bus controlled
- Form L



3.4. Fault Insertion Switch (FIU)

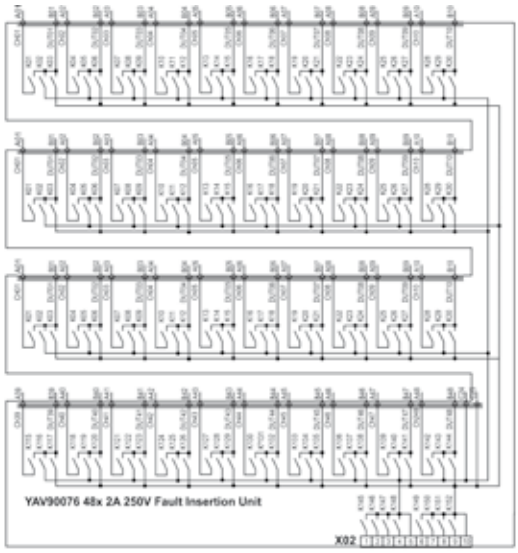
For the simulation of fault conditions in automotive & avionics applications

YAV90076

6200.76

48-Channels 1-wire 2A 250 V Two fault insertion buses

- Switching up to 60 W.
- Carry current up to 2A
- CAN bus controlled
- Form factor L

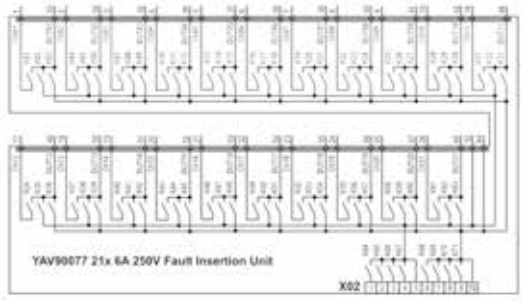


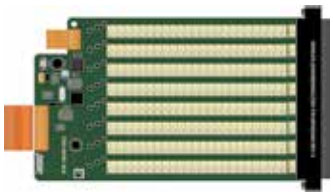
YAV90077

6200.77

21-Channels 1-wire 6A 250 V Two fault insertion buses

- Switching up to 250 W.
- Carry current up to 6A
- CAN bus controlled
- Form factor G



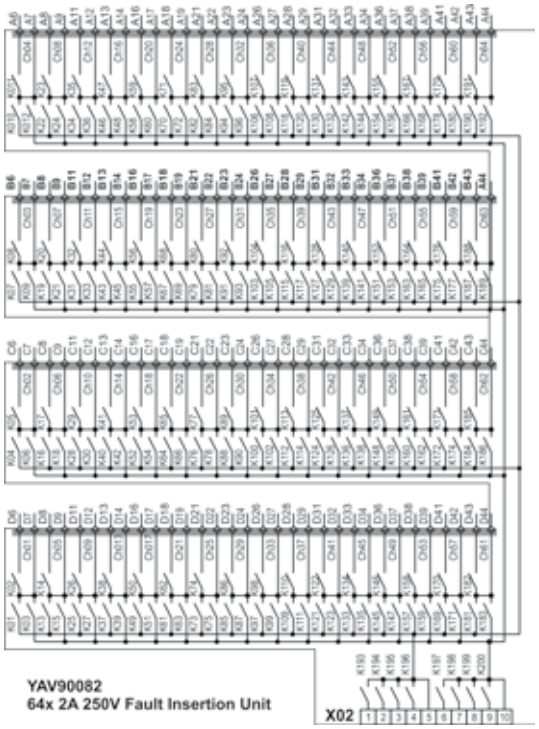


YAV91082

6210.82

64-channels 2A 250V 1 bus Fault Insertion Unit

- Switching up to 60W
- Carry current up to 2A
- CAN bus controlled
- Form factor L



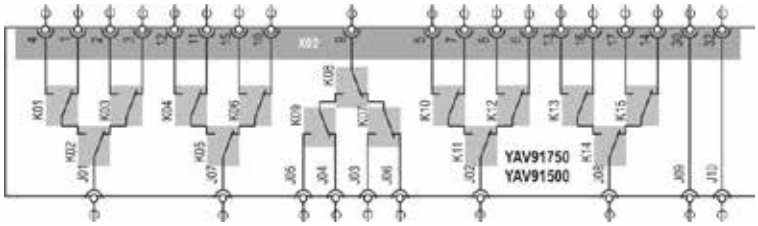
4. RF Multiplexers

YAV91500

6200.17

2,5 GHz 50 Ohm SMB Multiplexer

- 5x (1x4) Mux. +2x Pass through
- $30V_{AC/DC}$, 10W Max
- Max carry current 500mA
- Reflective
- Form A microcoax

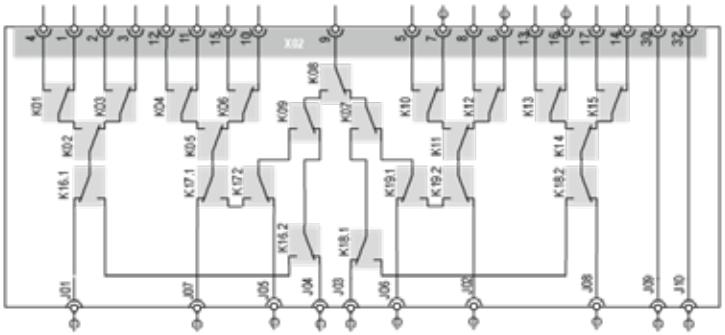


YAVAL022

AL022

2,5-GHz 50-Ohm Config. Multiplexer

- Self test capacity
- 5x (1x4) Mux. +2x Pass through
- $30V_{AC/DC}$, 10W Max
- Max carry current 500mA
- Reflective
- Form A microcoax

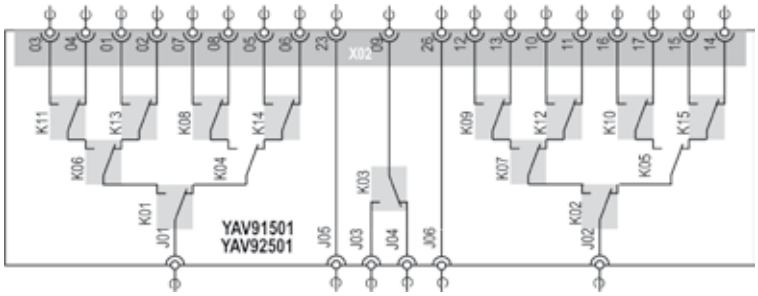


YAV91501

6200.17

2,5 GHz 50 Ohm SMB Multiplexer

- Reflective
- 2x (1x8) Mux. + 1x2 +2x Pass through
- $30V_{AC/DC}$, 10W Max
- Max carry current 500mA
- CAN bus controlled
- Form A microcoax



YAV92501

6200.17

2,5 GHz 50 Ohm SMB Multiplexer

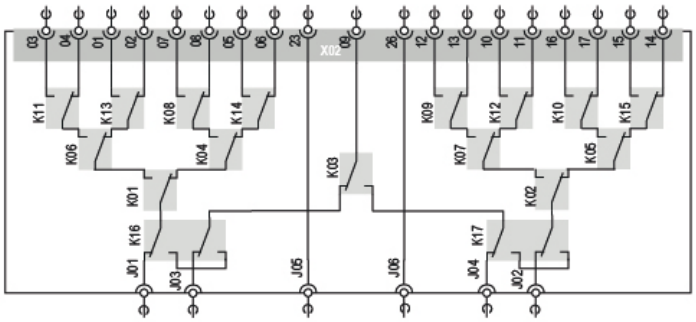
- Dissipative
- 2x (1x8) Mux. + 1x2 +2x Pass through
- $30V_{AC/DC}$, 10W Max
- Max carry current 500mA
- CAN bus controlled
- Form A microcoax

YAVAM308

AL308

2,5 GHz 50R 2x(1 to 8) Multiplexer

- Self test capacity
- 5x (1x4) Mux. +2x Pass through
- 30$V_{AC/DC}$, 10W Max
- Max carry current 500mA
- Reflective
- Form A microcoax

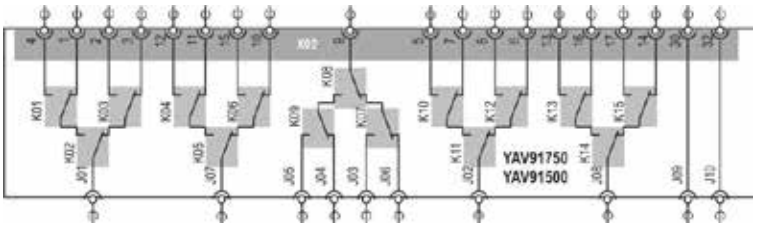


YAV91750

6200.17

2,5 GHz 75 Ohm SMB Multiplexer

- 5x (1x4) Mux. +2x Pass through
- 30$V_{AC/DC}$, 10W Max
- Max carry current 500mA
- CAN bus controlled
- Reflective
- Form A microcoax

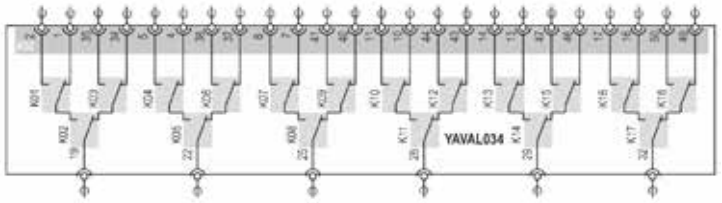


YAVAL034

AL034

2,5GHz 6x (1 to 4) MUX

- 6x 1 to 4 Reflective
- MMCX Connectors
- Front or Back cables trucking
- CAN bus controlled
- Form L

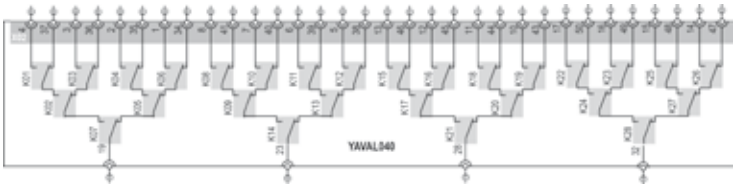


YAVAL040

AL040

2,5GHz 4x (1 to 8) MUX

- 4x 1 to 8 Reflective
- MMCX Connectors
- Front or Back cables trucking
- CAN bus controlled
- Form L

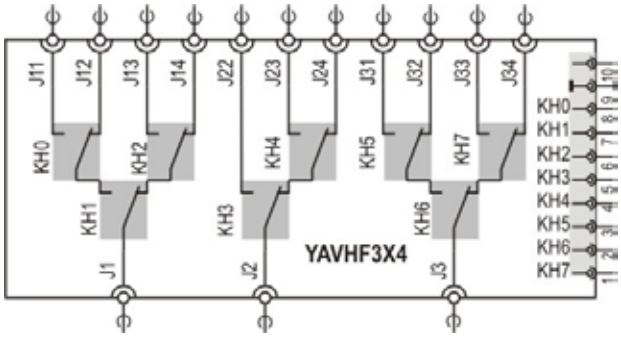


YAVHF3X4
YAVHF3X450

6200.43

2,5 GHz 50 or 75 Ohm SMB Relais Controlled Multiplexer

- 2.5 GHz 50 Ohm SMB
- 1x9 or 2x4 + 1x3 relays
- $30V_{AC/DC}$, 10W Max
- Max carry current 500mA
- Reflective
- Form E

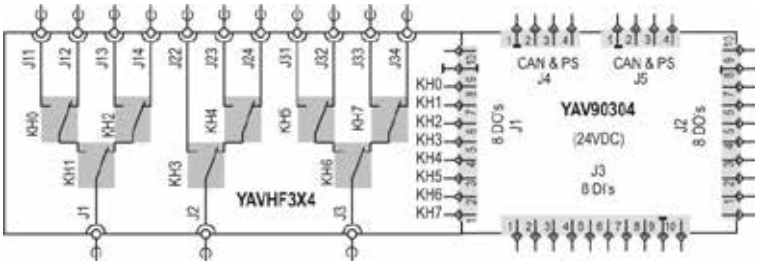


YAVHF3X4C
YAVHF3X4C50

6200.43

2,5 GHz 50 or 75 Ohm SMB Multiplexer

- 1x9 or 2x4 + 1x3 relays SMB 50 Ohm coaxial switching
- $30V_{AC/DC}$, 10W Max
- Max carry current 500mA
- CAN controlled
- Reflective
- Form E

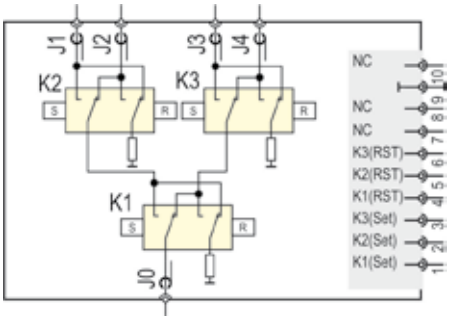


YAV90071

6200.71

6 GHz 50 Ohm relays controlled multiplexer

- 6-GHz 50 Ohm MCX
- 1 to 4 Channels
- $30V_{AC/DC}$, 1W Max.
- Max carry current 310mA
- Relay coil voltage $24V_{DC}$
- Absorptive
- Form E



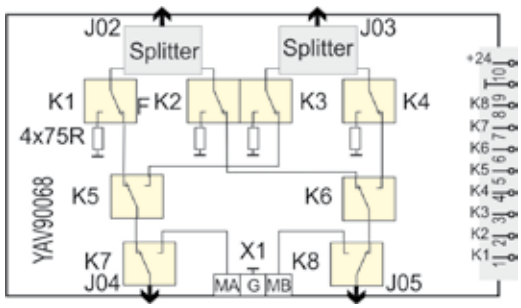
5. Satellite TV , Video & HDMI

YAV90068

6200.68

L Band 2x2 Matrix

- 2,5 GHz (Satellite B. Switch)
- 75-Ohm F Connector
- Standby dissipative switch
- Dual DC polarization signal and Measurement
- PNP 24V_{DC} control port
- Form F

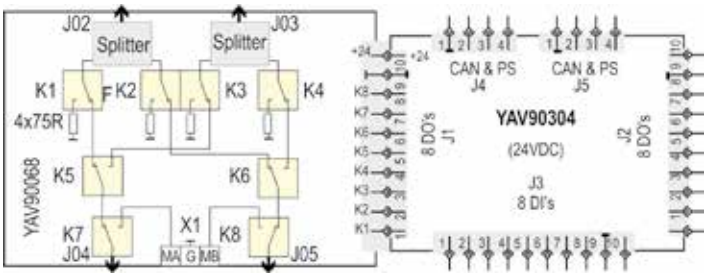


YAV90068C

6200.68

L Band 2x2 Matrix

- 2,5 GHz (Satellite B. Switch)
- 75-Ohm F Connector
- Standby dissipative switch
- Dual DC polarization signal and Measurement
- CAN Bus controlled
- Form F

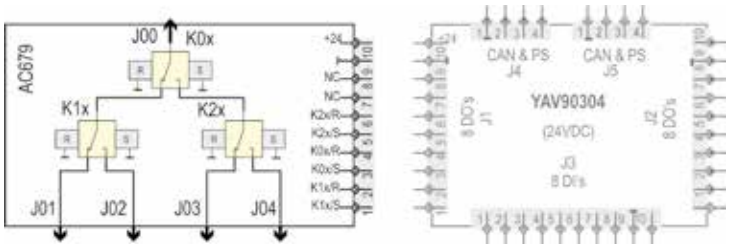


AC679

8000.61

1-to-4 HDMI Multiplexer

- Standard HDMI Sockets
- 24VDC PNP contro
- Optional CAN bus control w/YAV90304



YAV90304 not included with AC679

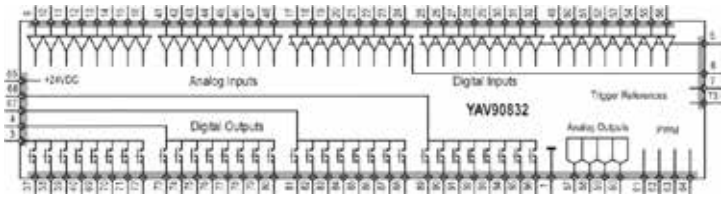
6. Digital and Analog I/O's

YAV90832

6200.22

80 I/O Multifunction board

- 16 Analog Inputs 0…15V_{DC} 10 Bits Z_{IN} = 1,2 MOhm
- 24 Digital Inputs (Trigger Adj.)
- 32 Digital Outputs 11…45V/650mA
- 4 Analog Outputs 0…10V_{DC} 10Bits
- 4 PWM Outputs
- CAN bus controlled
- Form A



YAV90096

6200.25

96 Sink/Source Inputs/ Outputs

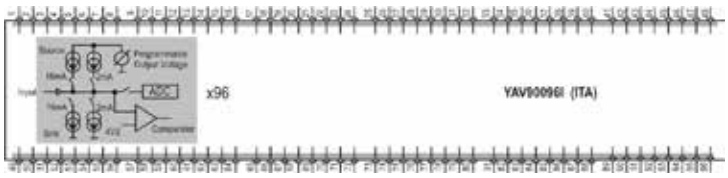
- Programmable output voltage
- 4 or 16 mA source current
- DC volmeter on eatch pin
- 4 V_{DC} comparator on eatch pin
- CAN controlled
- Form A –Receiver Module

YAV90096I

6200.25

96 Sink/Source Inputs/ Outputs

- Programmable output voltage
- 4 or 16 mA sink/source current
- DC volmeter on eatch pin
- 4 V_{DC} comparator on eatch pin
- CAN controlled
- Form A – ITA Module



YAV900962

6200.25

2x48 Sink/Source Inputs/ Outputs

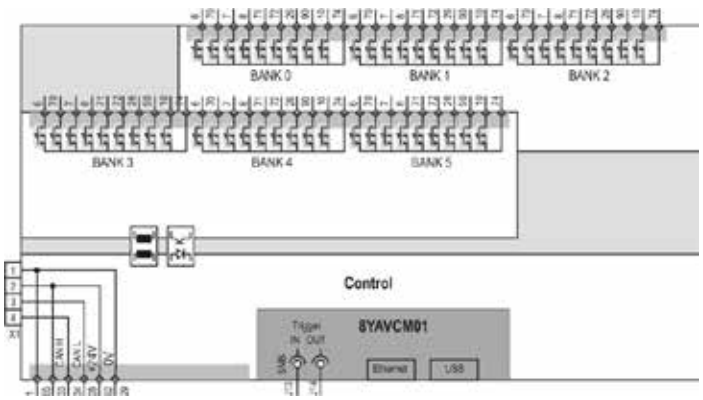
- Same than YAV90096 with 2x 50 pins Mini-D connectors
- PCB adapters to Quadrapaddle 192 pins for specific boards (Not included)
- Form K with CAN controller

YAV90048

6200.10

48 Optocoupled Open Drain 42V 6A Digital Outputs

- 6x8 Otputs isolated banks
- Trigger IN and/ OUT
- Parallell connection allowed
- Thermal and overcurrent protection
- CAN bus / Ethernet (LXI) control
- Ethernet or CAN Gateway
- Form G

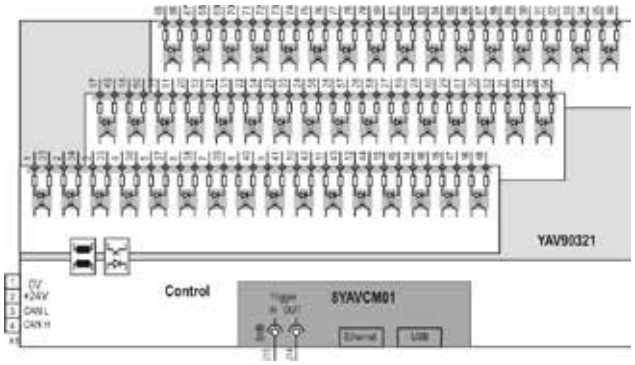


YAV90321

6200.19

48 Optocoupled digital inputs

- Input voltage: 3…42V_{DC}
- Isolation Inputs/Control > 1000V_{DC}
- CAN bus / Ethernet controlled
- OutputEthernet / Gateway
- FormG

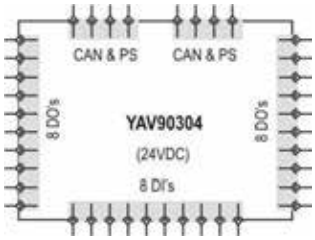


YAV90304

6200.44

16-Outputs, 8-Inputs 24V_{DC} module

- 8x 24V_{DC} PNP Inputs
- 16x 24V_{DC} 600mA PNP Out's
- CAN Controlled
- Form E

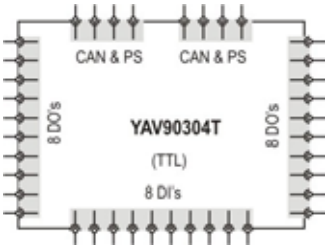


YAV90304T

6200.44

16-Outputs, 8-Inputs TTL module

- 8x TTL Inputs
- 16x TTL Out's
- CAN bus controlled
- Form E

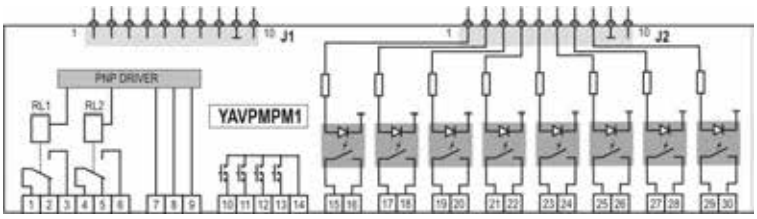


YAVPMPM1

6200.31

TTL & Power Outs. Interface

- 8 Optorelais AC/DC 350V_{DC}/120mA
- 4 Static PNP outputs 6…35V_{DC}/1,5A
- 2 Static PNP outputs 5…50V_{DC}/500mA
- 2 Relais Form C 250V_{AC}/10A
- Form E



YAV90083

6200.83

160-Ch 50V 200mA Digital Output

- Built-In Output Clamp Protects Against Inductive Kickback
- Open-Load and Short-Circuit Detection and Protection
- Thermal Shutdown
- Low 100µA (max) Quiescent Supply Current

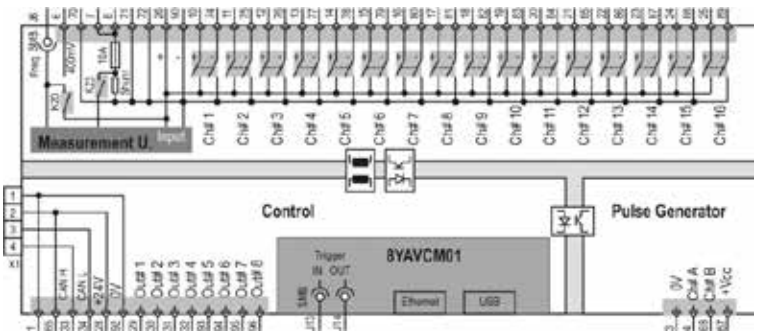
7. Measurement Units (MMU's)

YAV90MMU

6200.48

16-Channel 600V$_{AC}$ Multiplexer/Multimeter /Pulse Generator / Digital Outs.

- 4 ¾ Digits DC/AC True RMS
- Capacitors
- Diodes
- Self calibration
- CAN bus / Ethernet (LXI) control
- LXI to CAN Gateway
- Form G

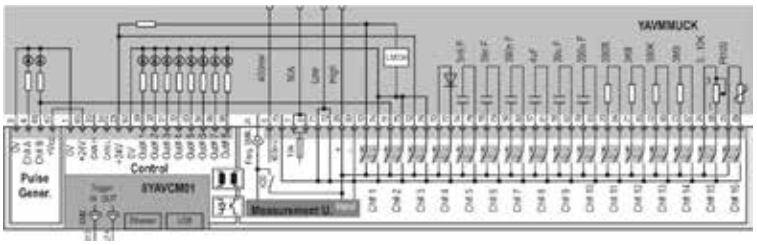


YAVMMUCK

6200.55

YAV90MMU Calibration Kit

- Calibrated Capacitors, Resistors, Diode and Voltage references
- Pt100 Temperature sensor
- Unplugging tool
- Contacts bridge for internal resistance compensation
- Calibration assistance software
- Form C

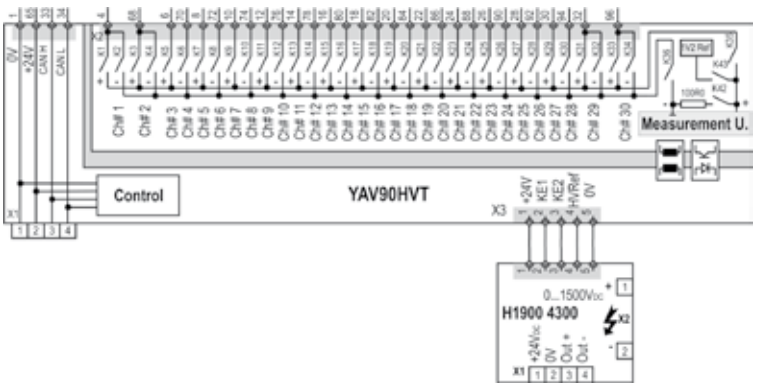


YAV90HVT

6200.26

32-Channel 1500V$_{AC}$ Multiplexer/DMM / Digital Outputs

- 3 ¾ Digits DC/AC True RMS
- Two Digital Outputs
- One Analog Output
- Hipot test capabilities
- CAN bus controlled
- Form G



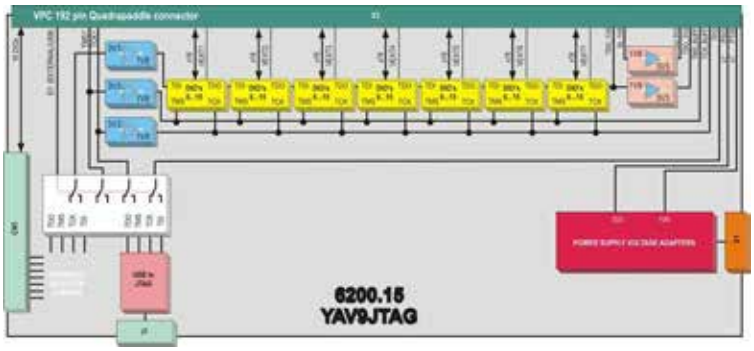
8. JTAG Test

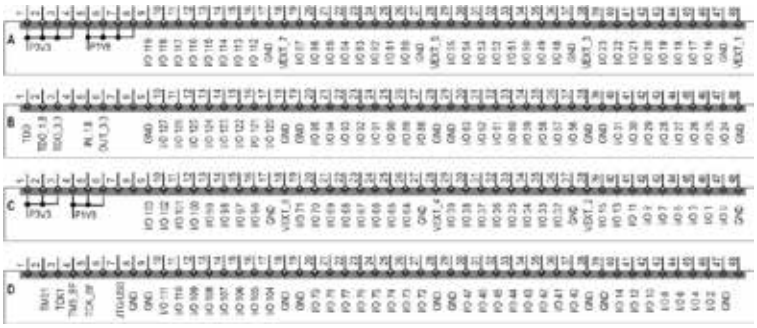
YAV9JTAG

6200.15

128 DIOs JTAG BSRU (Boundary Scan Resources Unit)

- 128 DIOs
- USB
- Compatible with all JTAG suppliers
- Form B



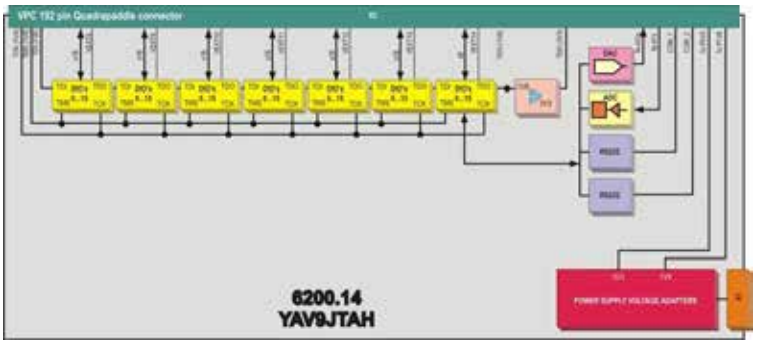


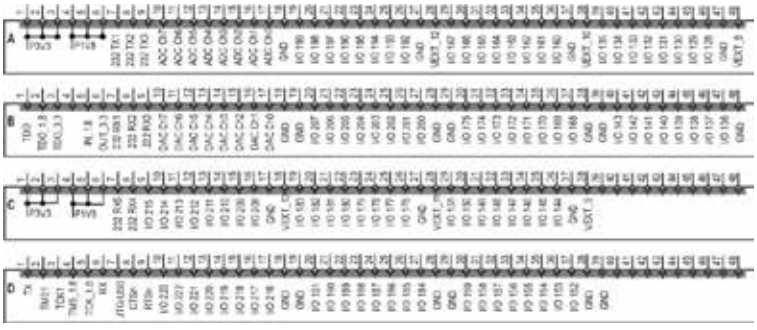
YAV9JTAH

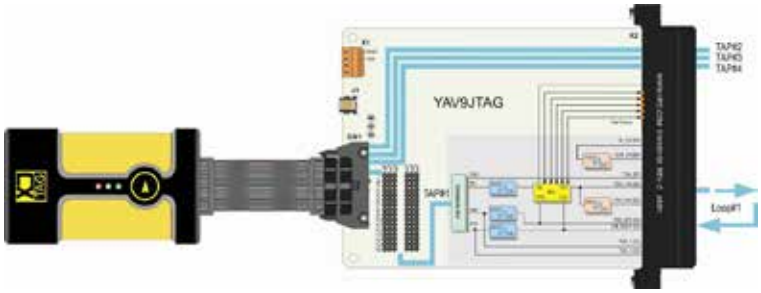
6200.14

80 DIOs, 8AIs, 8 AOs JTAG BSRU Expantion

- 80 DIOs
- 8 AIs
- 8 AOs
- Compatible with all JTAG suppliers
- Form B







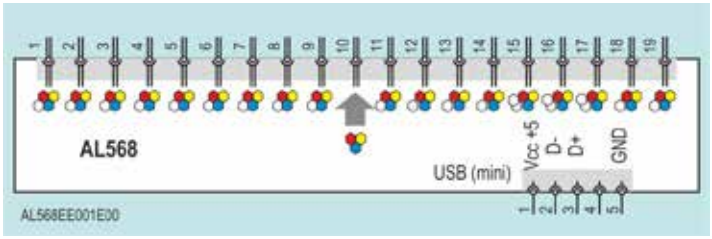
9. Color Measurement

AL568

AL568

18 Channel RGB Color Analyzer

- Relative measurement against value provided by a golden DUT
- Digital light sensor
- USB 2.1 interface. Mini B Type
- 18-Ch for direct insertion of POF leads
- 4-Sensors per channel: RGB and Clear
- Programmable analog gain and full digital signals processing
- Powered via USB connector
- LabView 7 TestStand operation panel
- Calibrated RGB emitter for board calibration
- DLL Library for easy integration into SW.



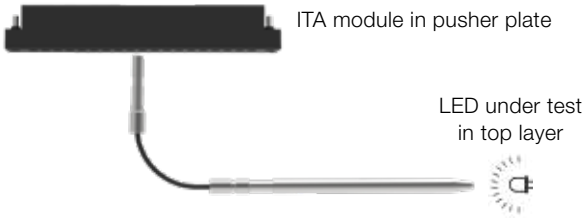
AN394

AN394

1.5mm POF pusher probe w/clamps to VP interface for AL568 Color Analyzer

- Total length 600mm

*Ask 6TL for other lengths



AN458

AN458

1.5mm POF pin plate probe w/clamps to VPC interface for AL568 Color Analyzer

- Total length 600mm

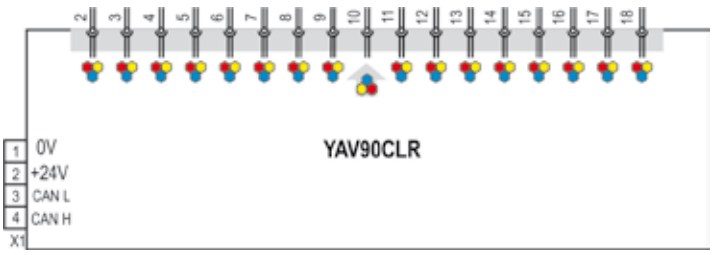
*Ask 6TL for other lengths

YAV90CLR

6200.29

16 Channel XYZ Color and intensity meter with calibration system

- Analog light sensor
- CAN bus
- Calibrated RGB source
- Calibrated POF leads
- F.O. Connectors



YAV90CLR10

6200.29

Fiber Optic heads for YAV90CLR color meter

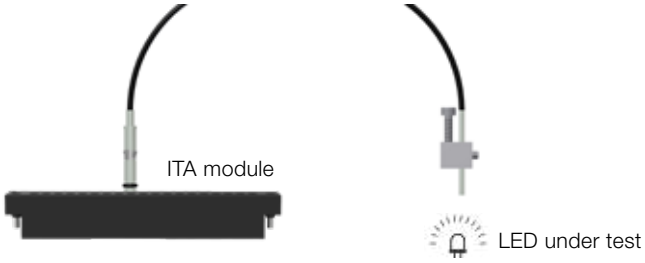
- 5 mm D Aspherical lense head
- Suitable for most aplications
- High adjustable support
- 600 mm fiber optic lenght

YAV90CLR11

6200.29

Fiber Optic heads 1,5 mm inner Ø for YAV90CLR color meter

- Most suitable when leds are close together on PCBs
- 600 mm fiber optic lenght



AA503

6200.29

Fiber Optic extraction tool for ITA contacts in YAV90CLR11

9.1. VPC contacts for 1mm POF

AN395

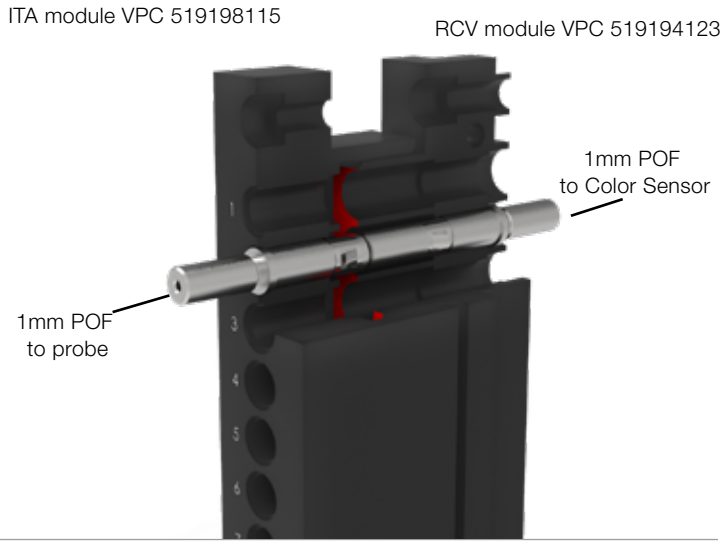
AN395

POF Optical contact ITA 1mm ext Ø for VPC 510108115 ITA module

AN396

AN396

POF Optical contact RCV 1mm ext Ø for VPC 510104123 RCV module



10. Programmable Resistors

YAV90084

6200.84

10-Ch Electronic Floating 10 KOhm Reostat Module

- 10x Electronic Potentiometer 8-bit resolution -256 steps- with build-in selft test.
- 10x Voltage to current source 0(4)..20mA
- 10x Analog Outputs (Buffer for voltage or frequency)
- 36-Ch Test Point voltage divider
- 2xCAN Bus Channels Terminators tester
- Expandable with NI PXI-6723 and PXI-6345.

YAV90084A

6200.84

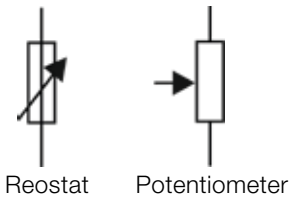
Configurable Reostat or Potentiometer Module

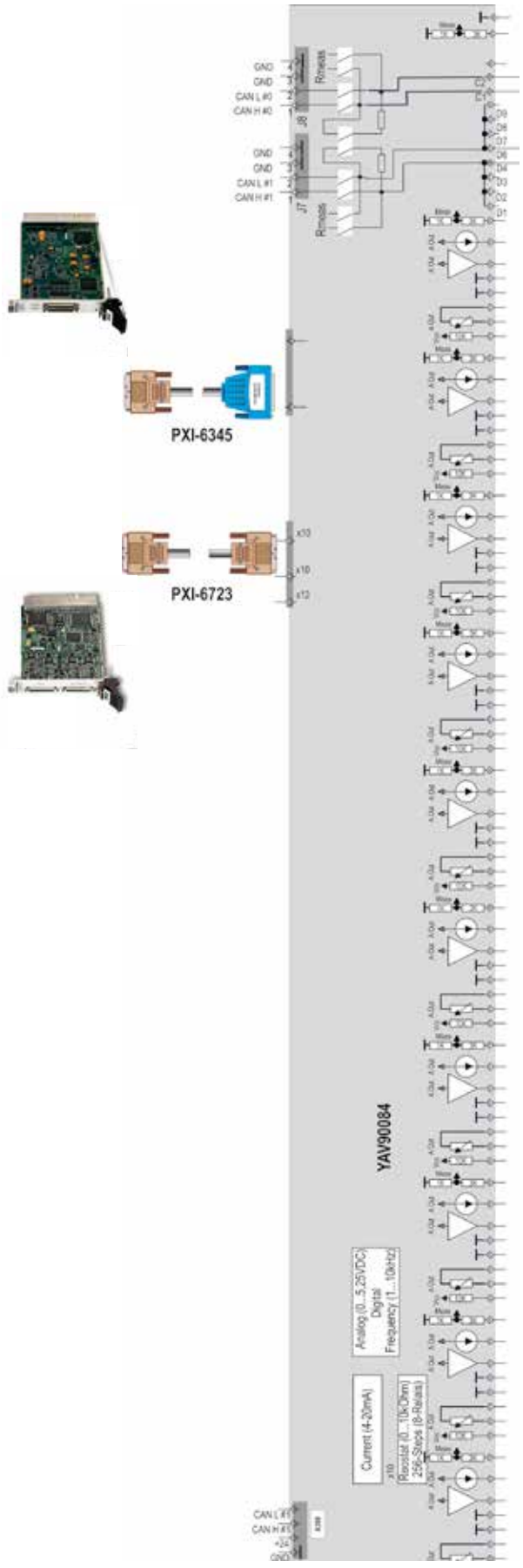
- 4x 8-Bit 1KOhm reostat
- 4x 8-Bit 40 Ohm reostat
- 2x 8-Bit 5 MOhm reostat

Configurable as :

• 2x 24 Bit 0...5MOhm Potentiometer • 2x 8 Bit 10 KOhm Reostat
• 4x 16 Bit 0...10 KOhm Potentiometer • 2x 8 Bit 0...5 MOhm Reostat
Strain gauge bridge simulator
Pt 100 simulator
Pt 1000 simulator

- 10x Electronic Potentiometer 8-bit resolution -256 steps- with build-in selft test.
- 10x Voltage to current source 0(4)..20mA
- 10x Analog Outputs (Buffer for voltage or frequency)
- 36-Ch Test Point voltage divider
- 2xCAN Bus Channels Terminators tester
- Expandable with NI PXI-6723 and PXI-6345.





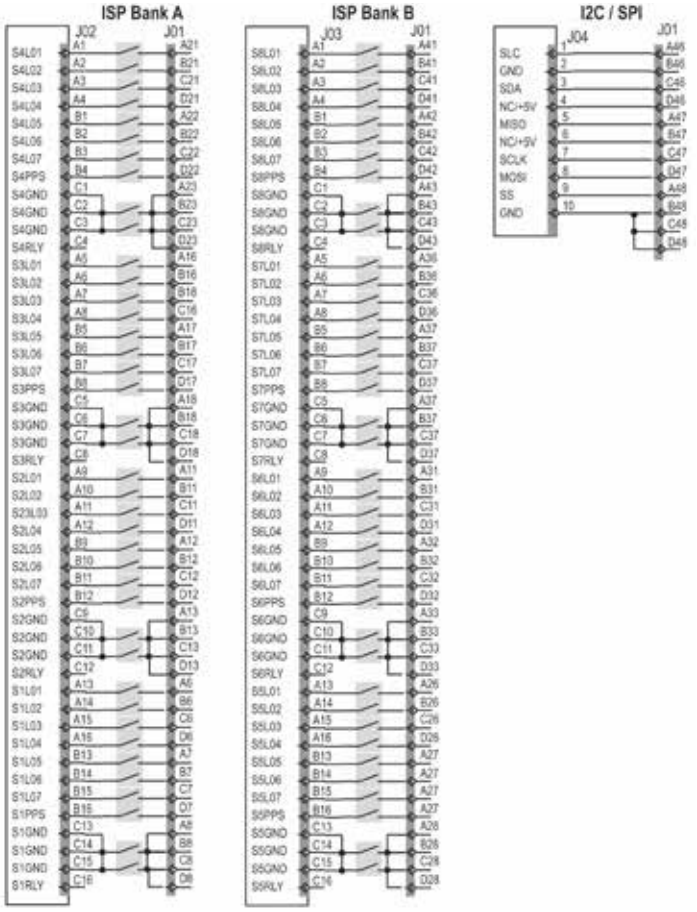
11. ISP (In System Programming)

YAV90ISP

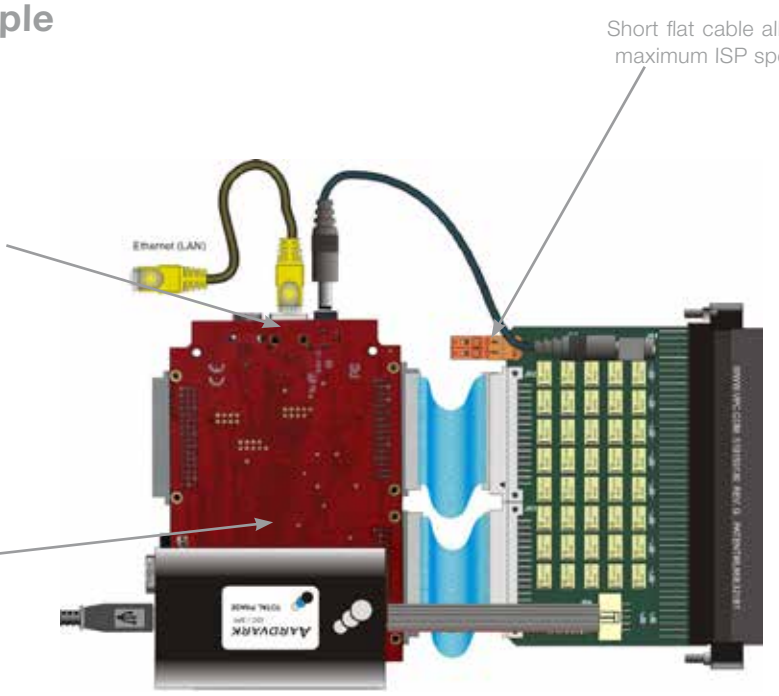
6200.02

8-Sites ISP & I2C/SPI Interface

- Digital I/O control
- Fixture friendly VPC
- Relay barrier included
- Multiplexed option
- Less than 300 mm in active wires length



Application example



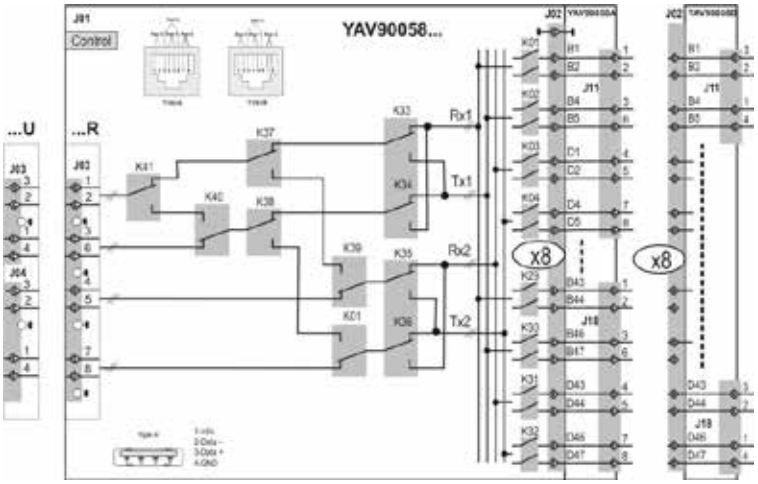
12. Communications Interface

YAV90058

6200.58

Giga-Bit Data Communications Multiplexer

- Suitable for 1GigaBit Ethernet, LVDS, RS232, USB and Telephony switching applications
- CAN bus controlled wide differential Bandwidth multiplexer for Differential Signals
- 100R Differential Impedance
- Requiered Quadrapaddle Module 510 151 105 (ITA) or ITA Interface boards



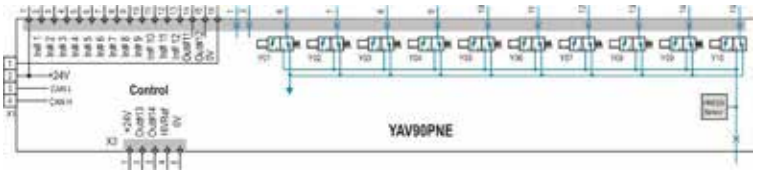
13. Pneumatic Sub-System

YAV90PNE

6200.30

10 pneumatic electrovalves

- 10x feedback digital inputs
- 2 Free 24V_{DC} digital inputs
- 2 Free 24V_{DC} digital outputs
- 1 Analog Output (0…+10V_{DC})
- Preasure sensor integrated.
- CAN bus control
- Form A

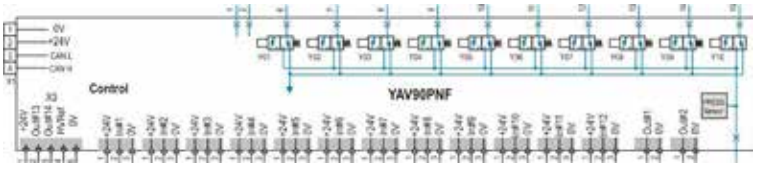


YAV90PNF

6200.16

10 pneumatic electrovalves

- 10x feedback digital inputs
- 2 Free 24V_{DC} digital inputs
- 2 Free 24V_{DC} digital outputs
- 1 Analog Output (0…+10V_{DC})
- Preasure sensor integrated.
- CAN bus control
- Form A without VPC connector

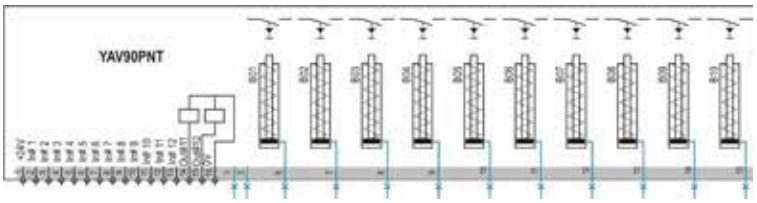


YAV90PNT

6200.45

Pneumatics self test board

- 12 jacks with feedback switch
- 2 relays
- ITA Connector module
- Form C



Picture showing the YAV90PNF, implemented inside an RF fixture

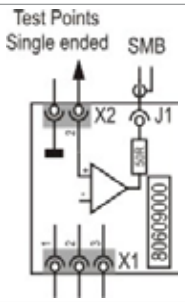
14. Active Probes

80609000

6200.34

Single ended active probe to 50 Ohm SMB

- + $15V_{DC}$ Power supply requiered
- Self adhesive tape fix
- Form J



Bandwidth

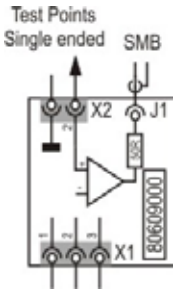
V_{PP}	MHz
1,25	42
2,5	24
5,5	16
10	8,5

80609007

6200.34

Single ended active probe to 75 Ohm SMB

- Required + $15V_{DC}$ Power supply
- Self adhesive tape fix
- Form J



Bandwidth

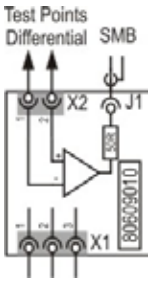
V_{PP}	MHz
1,25	42
2,5	24
5,5	16
10	8,5

80609010

6200.53

Differential active probe to 50 Ohm SMB

- Required ±$12V_{DC}$ Power supply
- Self adhesive tape fix
- Form J

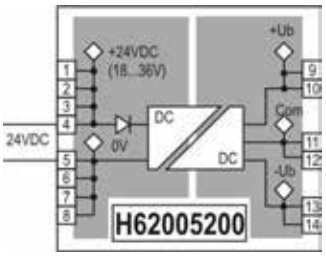


H62005200

6200.52

Isolated $24V_{DC}$/± 15V 200mA Active probe power supply

- 2x4 Terminals for $24V_{DC}$
- 2x3 Terminals for + 15V
- Form E



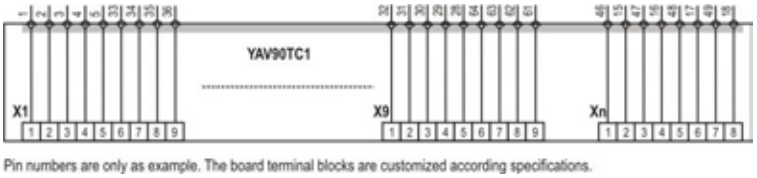
15. PCB Adapters

YAV90TC1

6200.36

Terminal block sockets interface to VPC 90.

- Pitch 7.62, 7.5, 5.08, 5, 3.92 and 3.5 mm
- Form C



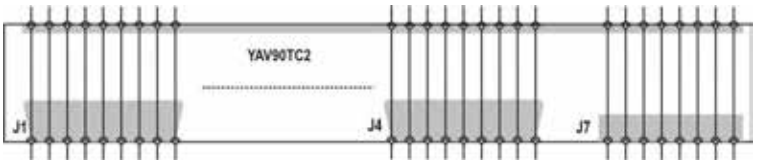
Pin numbers are only as example. The board terminal blocks are customized according specifications.

YAV90TC2

6200.37

Connectors Interface to VPC 90

- Sub-d-9, Sub-d-15, Sub-d-25, Sub-d-35, Sub-d-50, RJ12, RJ45, ...
- Form C



YAV90Q04

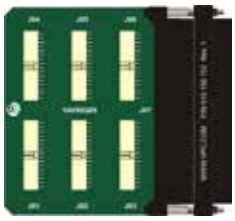
6200.54

4x IDC50 to Quadrapaddle 192 pins Interface

Cables set (Order Separately)

J6200540

- 4x 2 Mini-D50 x 400 mm



YAV90Q05

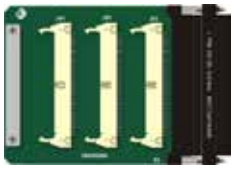
6200.54

6x IDC32 to Quadrapaddle 192 pins Interface

Cables set (Order Separately)

J6200550

- 6x 2 IDC 34 x 1000 mm



YAV90Q06

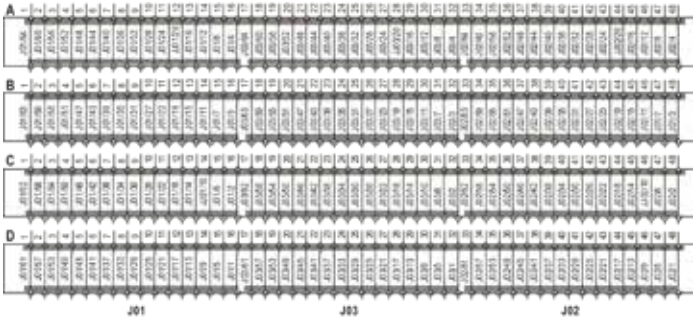
6200.54

3x IDC64 to Quadrapaddle 192 pins Interface

Cables set (Order Separately)

J6200560

- 3x 2 IDC 64 x 1000 mm



YAV90058C

6200.58

8-Ports Gigabit Ethernet RCV Interface

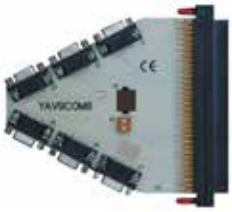
- 8-RJ45 LAN connectors to VPC RCV 192 pins module.

YAV90058A

6200.58

8-Ports Gigabit Ethernet ITA Interface

- 15-RJ45LAN connectors to VPC ITA 192 pins module.

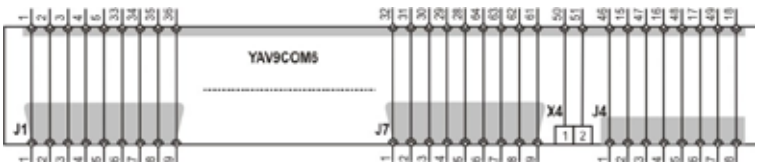


YAV9COM6

6200.24

COMM Interface

- 6x Sub-D-9
- 1x RJ45
- 1x Two pole terminal block
- Form D

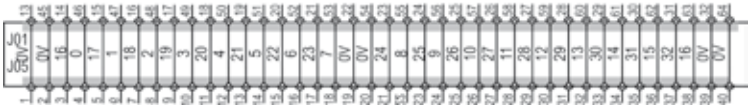


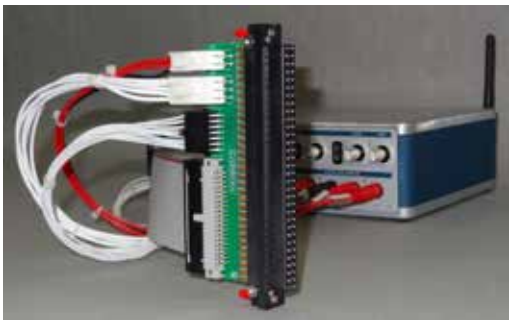
YAV90072

6200.72

VB to VPC RCV 64-Pin

- DMM Connection
- 3x Power Supplies
- 8x Logic I/Os
- 32x Logic Analizer





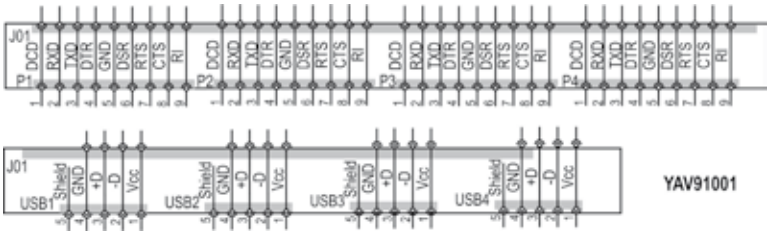
NI VirtualBench® to receiver thanks to YAV90072

YAV91001

6201.01

4 Sockets USB type A

- 4 Sockets DB9 female



J90RJ45I

7200.98

RJ45 (Ethernet 100 Base T) to 90 Series interface

- Use in ITA Side
- Requiered Tripaddle Modules VPC 510 108 126 (ITA)

J90RJ45R

7200.98

RJ45 (Ethernet 100 Base T) to 90 Series interface

- Use in Receiver Side
- Direct interface with RJ45 NI RJ45 serial ports (RS232C, RS422, RS485)
- Requiered Tripaddle Module VPC 510 104 136 (Receiver)

J90USBI

7200.98

Mini USB to 90 Series interface.

- Use in ITA Side
- Requiered Tripaddle Modules VPC 510 108 126 (ITA)

J90USBR

7200.98

Mini USB to 90 Series interface.

- Use in Receiver Side
- Requiered Tripaddle Modules VPC 510 104 136 (Receiver)

J90USBJ

7200.98

Mini USB (90º) to 90 Series interface.

- Use in ITA Side
- Requiered Tripaddle Modules VPC 510 108 126 (ITA)
-

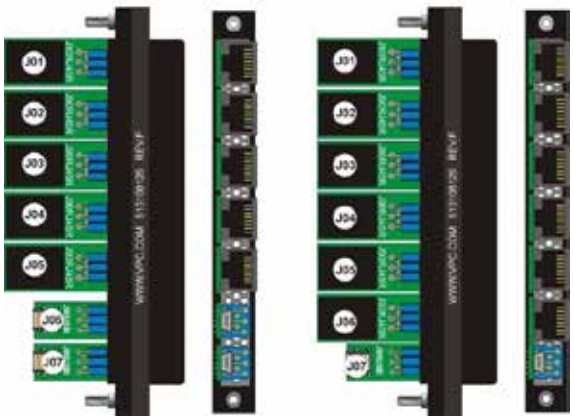
J90USBS

7200.98

Mini USB (90º) to 90 Series interface.

- Use in Receiver Side
- Requiered Tripaddle Modules VPC 510 104 136 (Receiver)

- 6TL recommends buying the following standard configurations:



P/N 511010410652 P/N 511010410661

RECEIVER SIDE

- Ask for assembly tool in the case of self assembly.

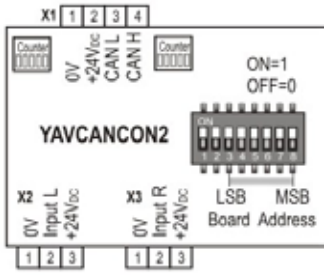
16. Miscellaneous

YAVCANCON2

6200.41

Fixture identifier

- Dual non-volatil Cycles counter
- Start test interface switch
- Maintenance soft panel
- CAN bus control
- Form E

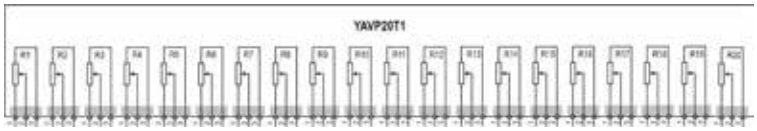


YAVP20T1

6200.32

20-Trimmers 20-Turns PCB

- 20x Multiturn potentiometers
- Pasive board
- Customized in values
- Form E

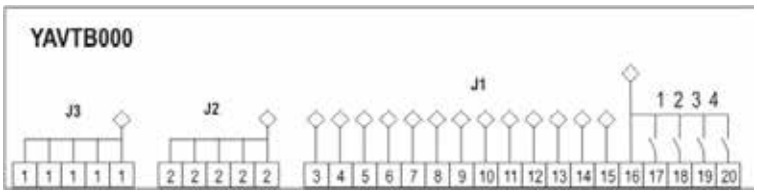


YAVTB000

6200.39

ITA Terminal block

- Test points on all the nets
- Four DIP switch (Presets)
- 4x Terminals on power poles
- Form E

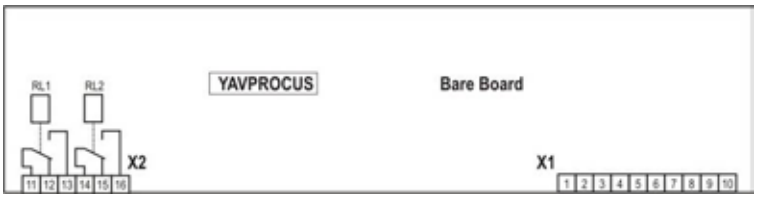


YAVPROCUS

6200.42

Special assemblies bare board for prototypes

- Form E

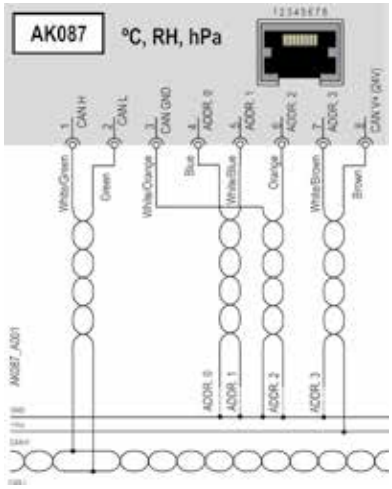


AK087

AK087

Test environement Sensor

- Temperature, Accuracy ±0,6 °C
- Atmosphere pressure
- Relative humidity



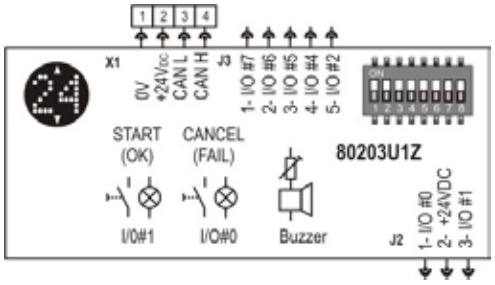
80203U1Z

6250.01

Rugged Fixture MMI

- CAN bus
- START and CANCEL pushbuttons
- OK and FAIL lights
- Two Charaters Dot Matrix display
- Arrows error indicators
- Vertical or horizontal display
- 7 external I/O's
- Adjustable sound Buzzer
- CAN bus cable
- Powered by 24V_{DC}

Application:
Intelligent Desktop Fixtures START/STOP and lights OK/FAIL



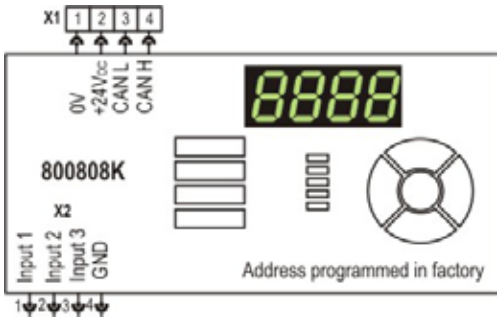
800808K

5400.01

Fixture MMI CAN bus

- CAN bus
- PASS, FAIL, TESTING and HIPOT Status indicators
- 5-LED Function indicators
- Four 7-Segment LED display
- 3-External Inputs
- Buzzer
- CAN bus cable
- Powered by 24V_{DC}

Application:
Intelligent Desktop Fixtures START/STOP and lights OK/FAIL



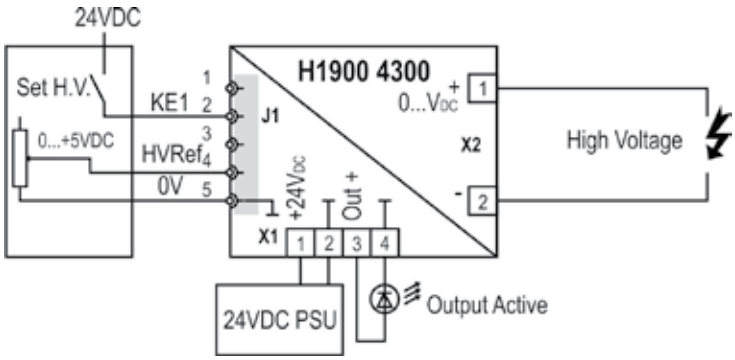
H1900 43xx

1900.43

DC High Voltage Programmable Power Supply

H19004301: 3000V_{DC} 5mA
H19004301: 1500V_{DC} 10mA
H19004301: 1000V_{DC} 15mA
H19004301: 750V_{DC} 20mA

- Short circuit protected
- Hardware Ajust. Current limit with output for external light indicator
- Control connector compatible with YA-V90HVT X3

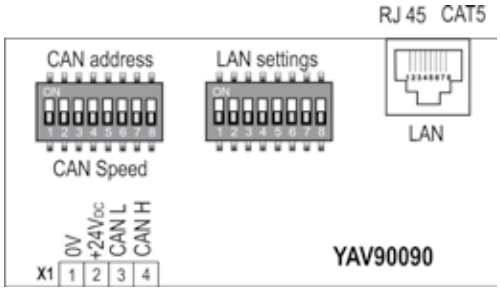


YAV90090

6200.90

Ethernet to CAN Bus Gateway

- Control 6TL modules through TCP/IP from a PC
- Configurables via two deep switches.



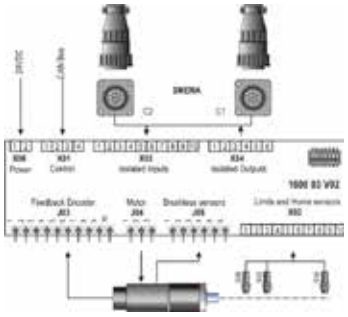
17. Motion control

8710061E02

1600.031

BLDC Servo controller with CAN Bus

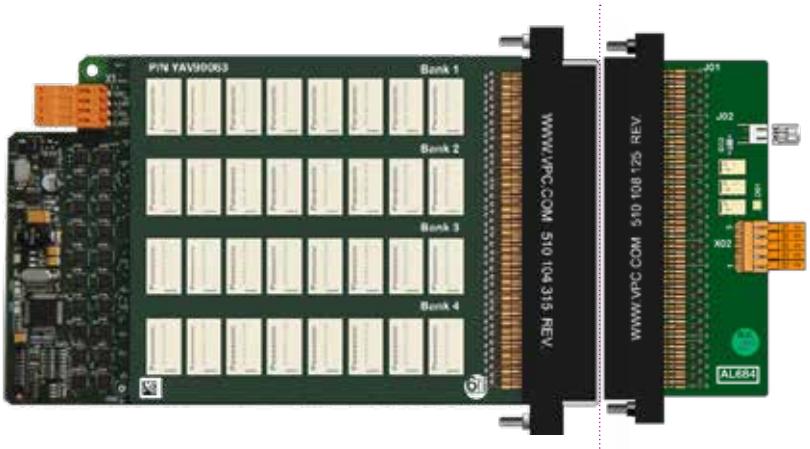
- Dc motor or BLDC motor with Hall effect sensors feedback
- 12...48V DC power supply required
- Quadrature encoder feedback for digital positioning
- limit inputs
- programmable I/O's (SMEMA, Intelock,etc.)



18. Self test modules

YAV modules self test counterparts can be installed into the selft test fixtures and thanks to them, the contact resistance can be measured and compared to stored values.

YAV P/N	Description	Self test Counterpart P/N
YAV90058	1 to 8 Ch. Gigabit Mux.	AL680
YAV90128	128-Channel 200V Mux.	AL681
YAV904X8	32-Channel 2-Wire Mux.	AL683
YAV90057	160-Channel 1,2 or 4-Mux.	AL682
YAV90063	32-Channel 2-Wire Mux 5A	AL684
YAV91074	48-Channel SPDT Relays	AL685
YAV90059	64-Channel 2-Wire Mux	AL687
YAV90416	64-Channel 2-Wire Mux.	AL688
YAV90061	32-Ch DPDT Relays	AL689
YAV90069	4x Two-Pole 2x16 Matrix	AL690
YAV90062	2x One-Pole 4x32 Matrix	AL691
YAV90CIN	12-Ch. Power Relay	AL904
YAV91750	2,5 GHz 50-Ohm Mux.	AL905
YAV90060	2x Two-Pole 4x16 Matrix	AL906
YAV90132	32-Ch 5A Relays	AL907
YAV90064	96-Channel STST	AL910
YAV90164	64-Ch SPDT Relays	AL912
YAV91616	Audio & Video Mux	AL913
YAV90PNE	Pneumatic Sub-System	YAV90PNT
YAV90MMU	Multimeter w/scanner	YAVMMUCK



YAV Module | Self Test module

19. YAV Pack

Applications:

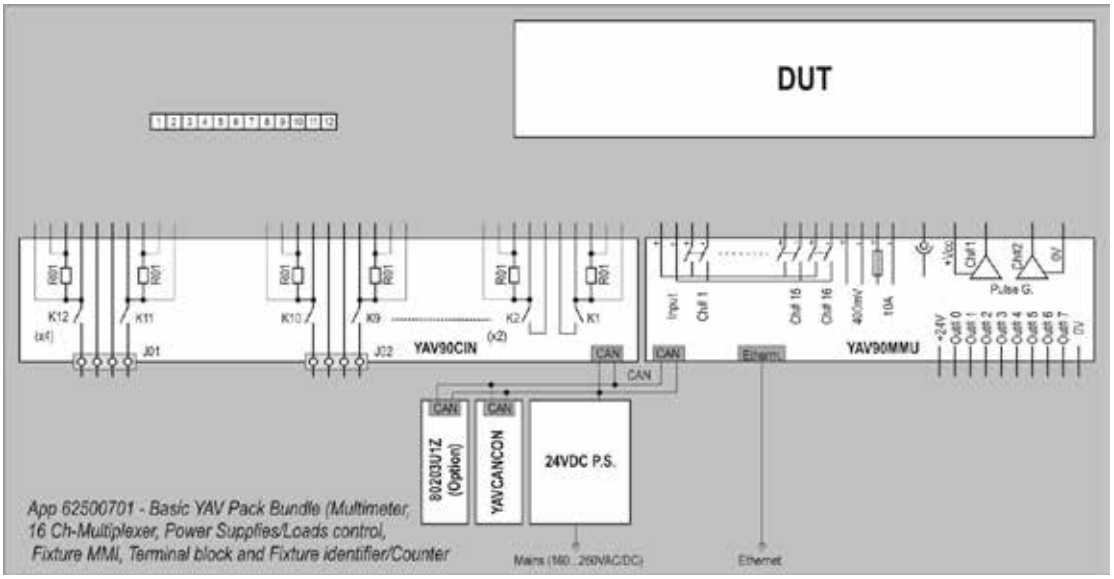
- Smart Fixtures
- Cell test in Burn-in test systems
- Autonomous switching unit
- Data adquisition system
- MMU Master Sequence Edition Software

YAVPACK00

7300.21

YAVPack basic configuration kit

- YAV90MMU – Ethernet Link -CAN
- YAV90CIN
- 24VDC Power Supply
- YAVCANCON
- Two free slots



H68002500

6800.25

MMU Master Script Edition Software

- Test sequence on a Excel Sheet
- Automatic code conversion/transfer
- PC monitoring/ Reporting
- Compatible with: YAV90MMU, YAV90CIM, YAV90PIN, YAV904X8, YAV90128, YAV90832, YAV90132, YAV90096, YAV90PNE.

YAVPACKF4

YAVPack 4 slots ITA Frame

- With strain relieft
- Terminal trip block 12c

20. Training Units

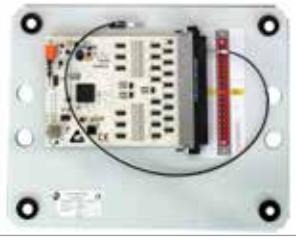
H62008000
6200.80

YAV DEMO CASE

- Air compressed manometer and pressure regulator
- Precision potenciometer and digital voltmeter
- USB to CAN bus interface
- 24VDC Power supply
- CD Demo Software (Phi6)
- Room for 6 trays
- Power cord

H62008080
6200.80

Geminy 2 Demo fixture



H62008029
6200.80

YAV90CLR LED Colour Measurement

H62008022
6200.80

YAV90832 Analog and Digital IO's

H62008026
6200.80

YAV90HVT High Voltage Multiplexer and DMM

H62008030
6200.80

YAV90PNE Pneumatic Sub-System

H62008025
6200.80

YAV90096 Bidirectional current source (x96)

H62008027
6200.80

YAV90128 128-Relays Configurable Multiplexer-Matrix

H62008048
6200.80

YAV90MMU Multiplexed Measurement Unit

H620080YB
6200.80

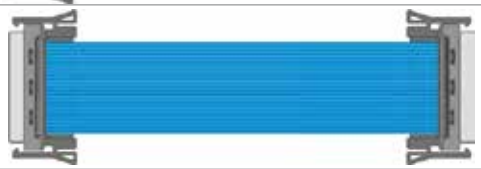
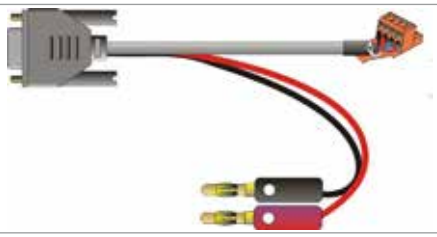
YAVPack Bundle 00

- YAV90MMU
- YAV90CIN
- MMI
- Power Supply 24VDC
- YAVMMUCK Calibra. Kit
- Power cord

Applications

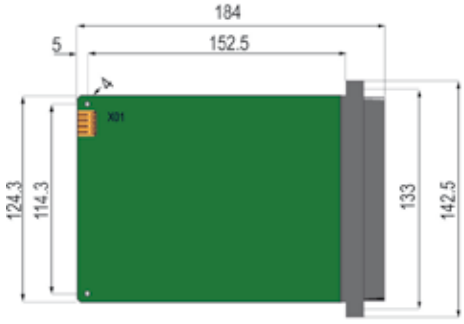
- DEMO Unit
- Software debugging
- YAV90MMU Calibration

21. Cable Sets

J62005400 Mini-D 50 / IDC cable 500mm	
J62005401 Mini-D 50 / Mini-D 50 400mm	
J62005402 Mini-D 50 / 2x IDC 26 400mm	
JJNIS100 Sub-D9 (Male) to RJ45	
JJLAN100 RJ45 to RJ45 direct	
J10CANS24 Sub-D9 (CAN) to pin terminal block + 2 Banana 1000mm	
J10CANS25 Sub-D9 (CAN) to pin terminal block 1000mm	

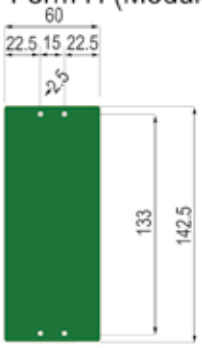
22. Dimensions

Form A (Tripaddle)

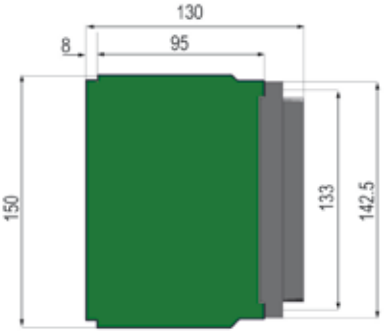


Remark: Form C and From D can not be mounted on chassis with sliding guides

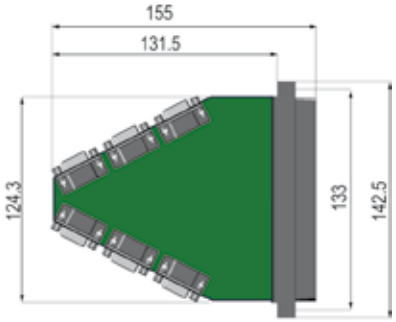
Form H (Module)



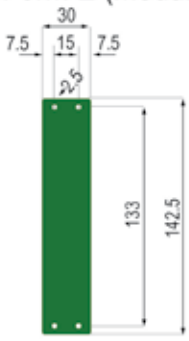
Form C (Tripaddle)



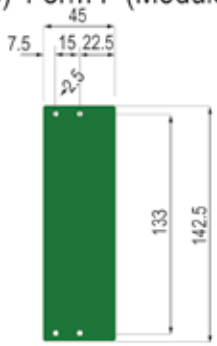
Form D (Tripaddle)



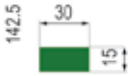
Form E (Module)



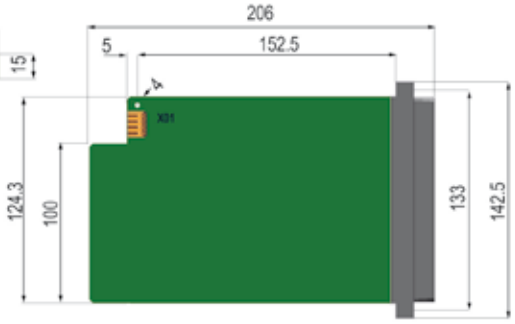
Form F (Module)



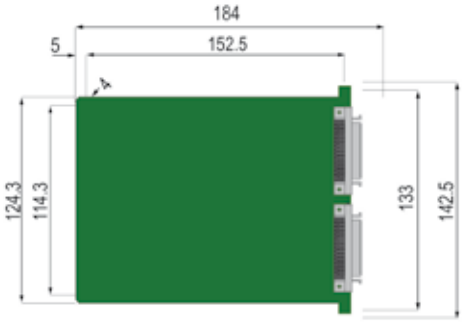
Form J



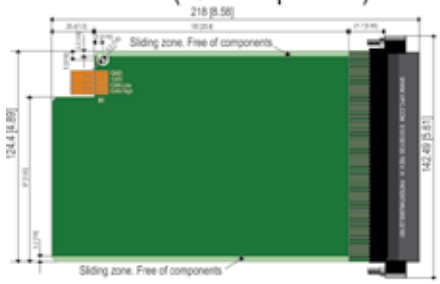
Form G (Tripaddle)



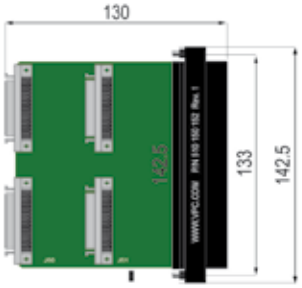
Form K (2x Mini-D 50)



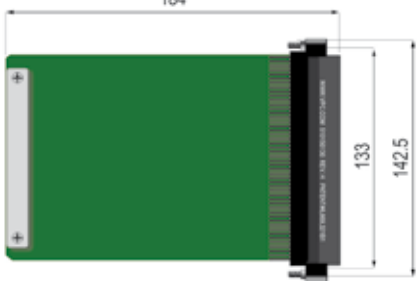
Form L (Quadrapaddle)



Form M (Quadrapaddle)



Form N (Quadrapaddle)



23. Wiring Accessories Table

P/N	To module	ITA Connector P/N	Quantity x Contact P/N	Quantity x Patchcord P/N	Self Test Diagnostic Board
YAV90048	ITA	VPC 510 108 126	96x VPC 610 110 108	96x VPC 7-103 924 000-036	½ YAV900962
YAV90057	ITA	VPC 510 151 105	192x VPC 610 138 109	192x VPC 7-121 924 000-036	AL682
YAV90058	ITA	VPC 510 151 105	192x VPC 610 138 109	192x VPC 7-121 924 000-036	AL680
YAV90058A	RCV	VPC 510 150 130	192x VPC 610 138 200	192x VCP 7-122 810 595-036	AL680
YAV90058C	ITA	VPC 510 151 107	192x VPC 610 138 115	192x VCP 7-105 870 595-036	AL680
YAV90059	ITA	VPC 510 151 105	192x VPC 610 138 109	192x VPC 7-121 924 000-036	AL687
YAV90060	ITA	VPC 510 151 105	192x VPC 610 138 109	192x VPC 7-121 924 000-036	AL906
YAV90061	ITA	VPC 510 151 105	192x VPC 610 138 109	192x VPC 7-121 924 000-036	AL689
YAV90062	ITA	VPC 510 151 105	192x VPC 610 138 109	192x VPC 7-121 924 000-036	2x YAV900962
YAV90063	ITA	VPC 510 108 126	96x VPC 610 108 126	96x VPC 7-103 924 000-036	AL684
YAV90064	ITA	VPC 510 151 105	192x VPC 610 138 109	192x VPC 7-121 924 000-036	AL910
YAV90065	ITA	VPC 510 151 105	192x VPC 610 138 109	192x VPC 7-121 924 000-036	2x YAV900962
YAV90067	-	-	-	-	-
YAV90069	ITA	VPC 510 151 105	192x VPC 610 138 109	192x VPC 7-121 924 000-036	AL690
YAV90075	-	-	-	-	-
YAV90076	ITA	VPC 510 151 105	192x VPC 610 138 109	192x VPC 7-121 924 000-036	-
YAV90077	ITA	VPC 510 108 126	96x VPC 610 110 108	96x VPC 7-103 924 000-036	-
YAV90083	ITA	VPC 510 151 105	192x VPC 610 138 109	192x VPC 7-121 924 000-036	-
YAV90084	ITA	VPC 510 151 105	192x VPC 610 138 109	192x VPC 7-121 924 000-036	-
YAV90084A	ITA	VPC 510 151 105	192x VPC 610 138 109	192x VPC 7-121 924 000-036	-
YAV90086	ITA	VPC 510 108 101	64x VPC 610 110 108	64x VPC 7-103 924 000-036	-
YAV90087	-	-	-	-	-
YAV90088	ITA	VPC 510 108 101	64x VPC 610 110 108	64x VPC 7-103 924 000-036	-
YAV90089	-	-	-	-	-
YAV90096	ITA	VPC 510 108 126	96x VPC 610 110 108	96x VPC 7-103 924 000-036	YAV90096I
YAV90096I	RCV	VPC 510 104 136	96x VPC 610 110 101	96x VPC 7-124 924 000-036	YAV90096
YAV900962	-	-	-	-	YAV90062
YAV90097	ITA	VPC 510 108 126	96x VPC 610 110 108	96x VPC 7-103 924 000-036	-
YAV90120	ITA	VPC 510 151 105	192x VPC 610 138 109	192x VPC 7-122 922 000-072	-
YAV90128	ITA	VPC 510 151 105	192x VPC 610 138 109	192x VPC 7-122 922 000-036	AL681
YAV90132	ITA	VPC 510 108 126	96x VPC 610 110 108	96x VPC 7-103 924 000-036	AL907
YAV90133	ITA	VPC 510 108 126	96x VPC 610 110 108	96x VPC 7-103 924 000-036	½ YAV900962
YAV90164	ITA	VPC 510 151 105	192x VPC 610 138 109	192x VPC 7-122 922 000-036	AL912
YAV90321	ITA	VPC 510 108 126	96x VPC 610 110 108	96x VPC 7-103 924 000-036	½ YAV900962
YAV904X8	ITA	VPC 510 108 126	96x VPC 610 110 108	96x VPC 7-103 924 000-036	AL683
YAV90832	ITA	VPC 510 108 126	96x VPC 610 110 108	96x VPC 7-103 924 000-036	YAV90096I
YAV90CIN	ITA	VPC 510 108 126	96x VPC 610 110 108	96x VPC 7-103 924 000-036	AL904
YAV90CLR	ITA	VPC 510 108 115	-	19x VPC YAV90CLR1x	-
YAV91074	ITA	VPC 510 151 105	192x VPC 610 138 109	192x VPC 7-122 922 000-036	AL685
YAV91616	ITA	VPC 510 108 126	96x VPC 610 110 108	96x VPC 7-103 924 000-036	AL913
YAV91082	ITA	VPC 510 151 105	192x VPC 610 138 109	192x VPC 7-122 922 000-036	-
YAV90ISP	ITA	VPC 510 151 105	192x VPC 610 138 115	192x VPC 7-121 924 000-036	-
YAV90HVT	ITA	VPC 510 108 126	50x VPC 610 110 108	50x VPC 7-103 924 000-036	YAV90096I
YAV90MMU	ITA	VPC 510 108 126	70x VPC 610 110 108	70x VPC 7-103 924 000-036	YAVMMUCK
YAV90PIN	ITA	VPC 510 108 126	80x VPC 610 110 108	80x VPC 7-103 924 000-036	YAV90096I
YAV90PNE	ITA	VPC 510 108 178	12x VPC 610 132 106	-	YAV90PNT
YAV90PNF	-	-	-	-	-
YAV90PNT	RCV	VPC 510 104 206	12x VPC 610 131108	-	-
YAV90TC1	RCV	VPC 510 104 136	54x VPC 610 110 101	54x VPC 7-124 924 000-036	-
YAV90TC2	RCV	VPC 510 104 136	54x VPC 610 110 101	54x VPC 7-124 924 000-036	-
YAV90Q04	ITA	VPC 510 151 105	192x VPC 610 138 115	192x VPC 7-121 924 000-036	2x YAV900962
YAV90Q05	ITA	VPC 510 151 105	192x VPC 610 138 115	192x VPC 7-121 924 000-036	2x YAV900962
YAV90Q06	ITA	VPC 510 151 105	192x VPC 610 138 115	192x VPC 7-121 924 000-036	2x YAV900962
YAV91001	ITA	VPC 510 108 101	64x VPC 610 110 108	64x VPC 7-103 924 000-036	-
YAV91500	ITA	VPC 510 108 262	VPC 610 141 101	VPC 7-361 116 000-036	-
YAV91501	ITA	VPC 510 108 262	VPC 610 141 101	VPC 7-361 116 000-036	-
YAV91750	ITA	VPC 510 108 262	VPC 610 140 103	VPC 7-365 179 000-036	AL905
YAV92501	ITA	VPC 510 108 262	VPC 610 141 101	VPC 7-361 116 000-036	-
YAV9COM6	ITA	VPC 510 108 101	64x VPC 610 110 108	64x VPC 7-103 924 000-036	-
YAV9JTAG	ITA	VPC 510 151 105	192x VPC 610 138 109	192x VPC 7-122 922 000-036	YAV90096I
YAV9JTAH	ITA	VPC 510 151 105	192x VPC 610 138 109	192x VPC 7-122 922 000-036	YAV90096I
YAVAL022	ITA	VPC 510 108 262	50x VPC 610 110 108	VPC 7-361 116 000-036	-
YAVAM308	ITA	VPC 510 108 262	50x VPC 610 110 108	VPC 7-361 116 000-036	-
YAVAL034	ITA	VPC 510 108 262	50x VPC 610 110 108	VPC 7-361 116 000-036	-
YAVAL040	ITA	VPC 510 108 262	50x VPC 610 110 108	VPC 7-361 116 000-036	-
YAVAL568	ITA	VPC 510 108 115	-	19x VPC YAV90CLR1x	-
YAVMMUCK	RCV	VPC 510 104 136	54x VPC 610 110 101	96x VPC 7-124 924 000-036	-

24. Phi6 Drivers for **YAV**Modules

Phi6 is the software environment to manage, control and program 6TL modules and systems

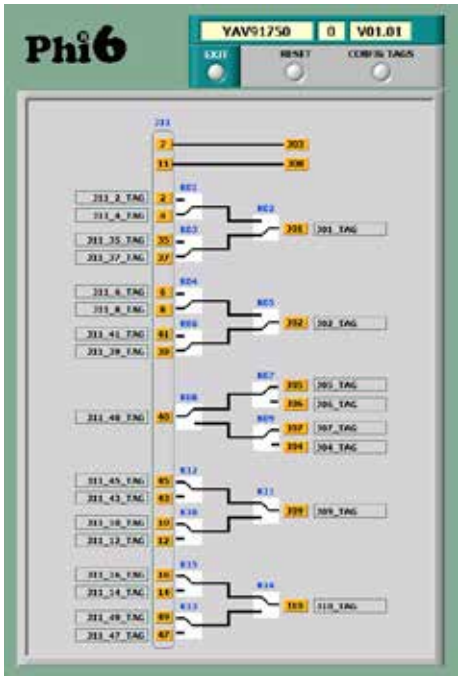
There are two main Phi6 components that are supplied together with each YAVModule to make integration easy and fast:

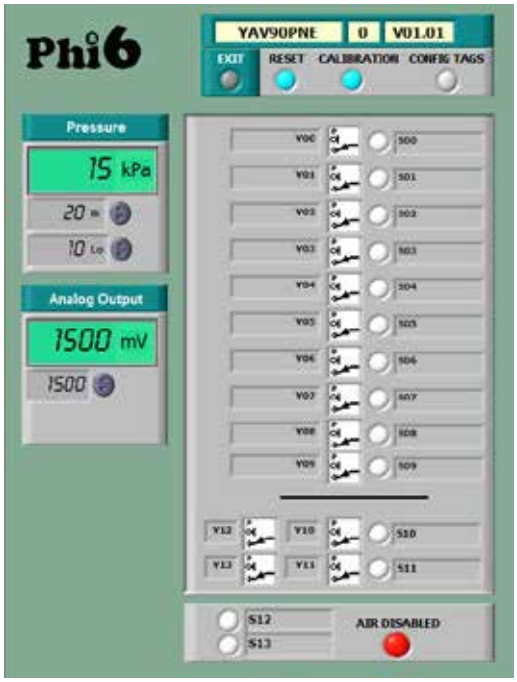
- Phi6 Explorer: to configure, calibrate, and quickly operate **YAV**Modules
- Phi6 Labview and TestStand drivers: Labview and TestStand functions necessary to interface with YAV modules

The implementation of the **YAV**Modules in your test system is very fast. When connected, the **YAV**Modules are immediately operative. The Phi6 explorer program will detect all available resources in your system, and can be used to connect directly to each module, set values, labels, test and calibrate each if applicable.

Download Phi6 drivers from: http://www.6TLEngineering.com/knowledge_base.asp

Phi6





- Plug your **YAV**Module and the control screen will POP-UP
- Use Phi6 explorer to operate all 6TL **YAV**Modules or 6TL drivers manually.
- Phi6 Explorer is a powerfull tool for test systems debugging.

25. Index

About FastATE:

All **YAV**Modules are part of 6TL's innovative FastATE Concept. This concept allows engineers to build up their ATE (Automatic Test Equipment) systems up to 70% faster. Each FastATE module from 6TL, is solving a typical recurring engineering task that the test engineer would face when designing the ATE from scratch.
Besides that, FastATE is offering many handy features and tools that resolve typical ATE design issues.
By using the 6TL FastATE concept it will not only be reduced the development time of the ATE, but it will also be greatly improved the quality of the final system.
FastATE is a concept developed by ATE engineers for ATE engineers to help them focus on the things that matter in the design of their ATE solution. For more information visit www.FastATE.info

NOTES:

NOTES:

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