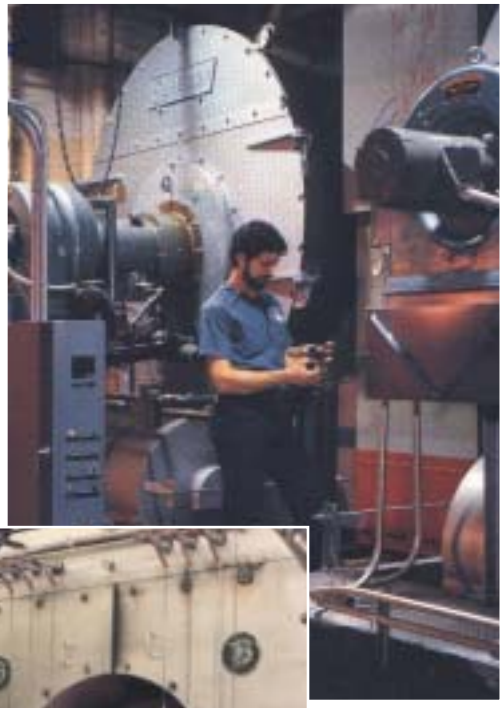
NEXUS

INTEGRATED CONTROLLER APPLICATIONS



- Hospitals
- Factories
- Refineries
- Schools
- Chemical Plants
- Process
- Universities
- District Heating

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NX-IN1
AUG 00

NEXUS

Sensor Type	NX1020 Gas Sensor	NX1030 Steam Sensor	NX1040 Boiler Temperature Sensor
Supply Voltage:	24Vdc +/-10%	24Vdc +/-10%	24Vdc +/-10%
Supply Current:	Approximately 10mA	Approximately 10mA	Approximately 10mA
Ambient Temperature Range:	32 - 160°F/ 0 to 70°C	32 - 160°F/ 0 to 70°C	32 - 160°F/ 0 to 70°C
Protection Category:	NEMA3 / IP44	NEMA3 / IP44	NEMA3 / IP44
Dimensions:	1 3/4" (44mm) dia x 3 3/8" (85mm) long (incl. connector)	1 3/4" (44mm) dia x 3 3/8" (85mm) long (incl. connector)	1/4" (6mm) dia x 7 7/8" (200mm) long. Body: 2 5/8" (66mm) dia. x 3.0" (75mm) long
Mounting Dimensions:	1/2" NPT or B.S.P.	1/2" NPT or B.S.P.	Insertion well not included
Electrical Connection:	6 ft Flying lead (not shown in photo)	6 ft Flying lead (not shown in photo)	6 ft Flying lead (not shown in photo)
Weight:	1 lb./450g	1 lb./450g	1/2 lb./200g
Maximum Working Pressure/ Temperature:	3.75psi/250mbar for S-class applications 4.50psi/300mbar for non S-class applications	375 psi/25bar (20 bar S class)	0 to 350°C /32 - 662°F Absolute Temperature: 842°F / 450°C
Burst Pressure:	15psi/1bar	1200psi/80bar	N/A

Nexus Safety Sensors

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NX-IN2
AUG 00

NEXUS

Global Care takes Global Dedication

Fireye is proud to offer true world wide service. We have dedicated and talented professionals, covering every continent. Our teams provide the highest level of technical and sales support.

TEAM USA

TEAM EUROPE

Our distributors and regional sales staff are always available to meet your requirements across the globe. Wherever your equipment is located, Fireye offers the same high quality level of service.

When you choose combustion equipment, make sure you benefit from the best support team.

TEAM ASIA

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NX-IN3
AUG 00

NEXUS

INTEGRATED CONTROLLER
BENEFITS

- Increasing Efficiency
- Reducing Fuel Consumption
- Reducing Emissions & Greenhouse Gases
- Reducing Downtime & Maintenance

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NX-IN4
AUG 00

NEXUS

DISPLAY AND COMMISSIONING TOOL

BURNER CONTROL

MODULATION RATE CONTROL

COMBUSTION AIR SUPPLY

SERIAL COMMUNICATION

NX550 DISPLAY Commissioning Tool

Burner Select (On-Off)

Fuel Select (Gas/Oil)

P T M Boiler Input 0-5v or 4-20mA

Remote Setpoint (4-20mA) Option

Combustion Air

Combustion Air Switch

IBM COMPATIBLE

A AUTO
B STATUS
C PURGE
D IGN
E RUN
F FLAME
G AIR

FAULT

UV UVSC IR

FLAME DETECTION

Oil Valve Ignition Pilot Valve

FVES

Gas Pressure Sensor

FVES

Gas Valve #1 Gas Vent Gas Valve #2

Fuel #1 Air #1 Fuel #2 Air #2

Feedback (4)

ALARM

FUEL CONTROL AND MONITORING

FUEL/AIR RATIO

FAULT INDICATION

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NX-IN5
AUG 00

NEXUS

Servo Type	NX04-1,-2	NX20-1, -2	NX50-1, -2
Supply Voltage:	NX04-1 120VAC +/-10%, 50/60Hz NX04-2 230VAC +/-10%, 50/60Hz	NX20-1 120VAC +/-10%, 50/60Hz NX20-2 230VAC +/-10%, 50/60Hz	NX50-1 120VAC +/-10%, 50/60Hz NX50-2 230VAC +/-10%, 50/60Hz
Nominal Torque:	3lb-ft/4Nm	15lb-ft/20Nm	37lb-ft/50Nm
Power Consumption:	5VA Nominal	6VA Nominal	15VA Nominal
Working Temperature Range:	14-140°F/-10 to +60°C, 100% duty Cycle	14-140°F/-10 to +60°C, 100% duty Cycle	14-140°F/-10 to +60°C, 100% duty Cycle
Protection Category:	NEMA2 / IP31	NEMA4 / IP65	NEMA4 / IP65
Maximum Angle Rotation:	270°	270°	270°
Rotation Limits:	High & low position micro limit switches	High & low position micro limit switches	High & low position micro limit switches
Feedback Potentiometer:	Single turn conductive plastic, 5KΩ +/- 1% linearity	Single turn conductive plastic, 5KΩ +/- 1% linearity	Single turn conductive plastic, 5KΩ +/- 1% linearity
Nominal Dimensions:	3.93"(100mm) high x 2.83" (72mm) wide x 4.56" (116mm) deep	5.7"(145mm) high x 3.93" (100mm) wide x 5"(128mm) deep	6.6"(169mm) high x 4.88" (124mm) wide x 5"(128mm) deep
Weight:	1.55 lbs./0.7kg	4.4 lbs./2kg	5.94 lbs./2.7kg
Installation Position:	Any	Any	Any

Nexus Positioning Motors

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NX-IN6
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NEXUS

TECHNICAL SPECIFICATIONS

Nexus Controller

Supply Voltage:	120/230 VAC, 50/60Hz
Power Consumption:	Approx. 20VA
Ambient Temperature Range:	32°-140°F (0°to 60°C)
Maximum Connected Load:	2000 VA
Control Unit Protection Category:	Indoor: Mount in a NEMA 12, IP40 enclosure Outdoor: Mount in a NEMA4, IP54 enclosure Situate in a clean environment according to EN6730-1(IP rating 00)
Dimensions:	
UL listed Wiring Base:	6 7/32" (158mm) wide x 13.0" (330mm) high
Control Unit:	3.0" (78mm) wide x 9.0" (225mm) high x 5 7/8" deep 5 7/78" (148mm) tall, installed in wiring base
Weight:	6.6 lbs (3.0kg) including wiring base

DISPLAY UNIT

2 line 20 character dot-matrix vacuum fluorescent

Dimensions:

4.84" (123mm) square to fit panel cutout
3.8" (97mm) high x 4.25" (108mm) wide

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NX-IN7
AUG 00