

THREE DIVER COMPACT AIR PANEL (BACK HIDDEN PLUMBING) SY-3DCPD023-R-XDV-XM



PART NO : SY-3DCPD023-R-XDV-XM


IMCA D023	DESIGN for Surface Oriented (Air) Diving Systems
IMCA D018	Code of Practice for The Initial and Periodic Examination, Testing and Certification of Diving Plant and Equipment




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Sr.	Description
1	Powder coated marine grade aluminum non rust fascia (various colors available)
2	All engraved lines with each valve/fitting/regulator clearly marked
3	DP alarm to connect to bridge with mute button (optional)

Design criteria for dive panel

1 x 0-230 fsw/70 msw Depth gauge, 6", 0.25 % accuracy, mirror scale, with calibration point , Diver 1, Color coded **Green** 

1 x 0-230 fsw/70 msw Depth gauge, 6", 0.25 % accuracy, mirror scale, with calibration point , Diver 2, Color coded **Yellow** 

1 x 0-230 fsw/70 msw Depth gauge, 6", 0.25 % accuracy, mirror scale, with calibration point , Diver 3, Color coded **Red** 

Sr.	Part Number	Description	Qty
1	SY-PRO O2	Oxygen analyzers with high low alarm (one per diver)	3
2	SY-VFA-BV-23	Flowmeters (per analyzer)	3
3	SY-873-400	Option 1 Aqua Environment high pressure Regulator w/gauges	3
4	SY-44-1315-2081-005	Option 2 Tescom high pressure regulator	3
5	SY-FLR-DS	Flow Restrictor (one per diver)	3
6	SY-DIVMKII-COM (Optional)	Interspiro full face breathing air mask, communications, 10 mtr of Communication cable with end fitting (one end to BA comms/other to chamber comms)	1
7	SY-UPS-DP (Optional)	Emergency power back – UPS for video systems	1
8	SY-PG-A-2.5-5000	High pressure gauges (incoming air supply) 0-5000 psi (Hp1)	3
9	SY-PG-A-2.5-5000	High pressure gauges (incoming air supply) 0-5000 psi (Hp2)	3
10	SY-PG-A-2.5-500	Low pressure gauge (regulated air supply) 0-500 psi	3
11	SY-PG-A-2.5-500	Low pressure gauge (common low pressure supply) 0-500 psi	3
12	SY-PG-A-2.5-500	Low pressure gauge (downstream for umbilical supply pressure)	3
13	All air supply lines (inlet and outlet) are color coded per diver		
14	Pressure gauges		
15	Diver 1 – Independent high pressure line 1 Diver 1 – Independent high pressure line 2 Diver 2 – Independent high pressure line 1		
16	Diver 2 – Independent high pressure line 2 Diver 3 - Independent high pressure line 1 Diver 3 - Independent high pressure line 2		
17	Diver 1 – Common low pressure line Diver 2 – Common low pressure line Diver 3 – Common low pressure line		
18	All tubing used will be stainless steel high pressure		
19	All valves for incoming air supplies will be brass , high pressure		
20	All valves for regulated supplies will be brass, high pressure		

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DIVE PANEL COMMUNICATION (Sold Separately)

Sr.	Part Number	Description	Qty
1	2830A-11	Amron 3 diver radio with ac/dc power	2
2	2405-28	Push to talk microphone	2

DIVE PANEL DIVER CCTV SYSTEMS (Sold Separately)

Sr.	Part Number	Description	Qty
1	SY-DIVERVISION SERIES	Diver 1/Diver 2 / Diver 3 , surface control unit, Synergy/Outland Technology	3
2	SY-MON-15.5-TFT	Diver 1/Diver 2 / Diver 3 , 15.5"waterproof TFT monitor	1
3	SY-DVR-1TB-HD	Primary Recorder, 1 TB hard drive (simultaneous recording of all diver)	1
4	SY-DVR-1TB-HD	Backup recorder (black box) 1 TB hard drive (simultaneous recording of all dives), USB out for recording to USB sticks, HDMI out for mirror image to be displayed remotely via HDMI cables	1

THREE DIVER COMPACT AIR PANEL (BACK HIDDEN PLUMBING) SY-3DCPD023-R-XDV-XM

SY-2830A-11 AMCOM III THREE-DIVER RECHARGEABLE PORTABLE COMMUNICATOR WITH OUTDOOR AC POWER MODULE AND INTERNATIONAL LOCKING POWER CORD



NEWLY DESIGNED ENHANCEMENTS:

High Audio Fidelity

Ultra-low noise circuit combined with noise suppression circuitry produces crystal clear speech. Automatic gain adjustment

will guard audio signal from distortion, enhance speaker protection and audio quality. Increases band width 47%.

Extended Battery Operation Time

Audio amplifier card deploys the state-of-the-art Class-D digital audio power amplifier. Has very low power dissipation, produces less heat, and extends battery life up to 32%.

Flexible Gain Settings

The audio amplifier card has adjustable gain settings to accommodate different communication applications and environments.

Ultra-Low Electromagnetic Interference (EMI)

EMI is achieved through spread-spectrum and de-phase control techniques providing for optimum integration with diving systems.

Outdoor Rated AC Power Module

Weather resistant, IP65 rated AC power entry module accommodates country specific AC power cords.

Country Specific V-Lock AC Power Cord

At time of order, simply choose the IP54 rated Locking AC power cord you need.

FEATURES:

- Separate channels and volume controls for each diver and tender to accommodate individual earphone and microphone adjustments, equipment variations and individual comfort levels.
- Divers' umbilicals can be set to 4-wire mode (full duplex) or 2-wire mode (push-to-talk) or any combination of the two modes for any diver.
- Ability to use both dynamic and pre-amplified diver microphones with a unique circuit that detects microphone type and automatically adjusts volume levels.
- Weatherproof push-to-talk microphone for better voice intelligibility topside. For optimum clarity, see Tech Note (below) for other recommended equipment.
- Internal charger allows for simultaneous charging and operation of the unit while protecting the rechargeable battery from being over-charged. Automatically supplies power to the audio amplifier when AC power is disconnected to allow for continued operation.

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SPECIFICATIONS:

- Input Impedance (Each Input): 250 Ohms
- Frequency Response: 300 - 10000 Hz
- Common Mode Rejection: 40 dB Minimum
- Current Drain Maximum Full Volume: 3 Amps
- Minimum Quiescent: 0.190 Amps
- Output Impedance: 4 Ohm
- Power Supply Voltage: 12 VDC Nominal (9 Volts Minimum - 16 Volts Maximum)
- AC Power Operating Range: 90-264 VAC, 50-60 Hz
- Sensitivity (Input): 0.5 mV
- Output Power (RMS @ 4 Ohm Load, 12 VDC): 10 Watts Audio
- Battery Life: 41 hours
- Dimensions: 10 in. H x 9 in. W x 14.5 in. L (25.4 cm x 22.9 cm x 36.8 cm)
- Weight: 17.05 Lbs. (7.73 Kg)

INCLUDED WITH COMMUNICATOR:

SY-2830A-11 AMCOM III Two-Diver Rechargeable Basic Portable Communicator with Outdoor Power Module and International Locking Power Cord includes:

- (1) SY-2405-28 Amron Hand-Held Push-to-Talk Microphone
- (1) SY-2890-05 Amron 12 VDC Sealed Lead Acid Gel-Cell Rechargeable Battery with Slide terminals
- (1) SY-283XA-UM Amron Three-Diver Portable Communicator User Manual

AVAILABLE OPTIONS:

- SY-2460SM-28 Amron Single Muff Operator Headset with Boom Mic and Dual Banana Plugs
- SY-2401-28 Amron Deluxe Headset with Boom Mic
- SY-2822-28 Amron Remote Walk-and-Talk (4-wire mode)
- SY-2821-28 Amron Remote Walk-and-Talk (2-wire mode)

TECH NOTE:

All communicators will inherently transfer topside noise to the divers when the tender speaks directly into the communicator's panel speaker. To eliminate background noise at the surface, use the 2405-28 Push-to-Talk Microphone, included with this model. For optimum communications, we recommend purchasing the 2401-28 Deluxe Headset with Boom Mic, topside. For tender mobility, use the 2401-28 Deluxe Headset with Boom Mic along with the 2822-28 Remote Walk-and-Talk (4-wire mode) or the 2821-28 Remote Walk-and-Talk (2-wire mode). For wireless tender communications, order the 2830A-03 Three-Diver Deluxe Portable Communicator with Wireless Tender.

CERTIFICATES PROVIDED WITH EACH THREE DIVER AIR PANEL

Diving panel	Bureau Veritas
Imca	D018 / D023
Class	Bureau Veritas pressure test witness for entire system
Fmea	As built by Synergy
Fmea stamped by class	As built by Synergy and reviewed by Class (optional)
Warranty	One year Synergy manufacturing warranty

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Third Party Inspection Report
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INSPECTION REPORT No: ISIA-12110-B-03
Revision No: 0

Client: W/S Strategic Diving and Equipment Solutions FZC
Product: D018, D023

Inspected Location: UAE, Industrial Area, Dubai
Inspection Reference No: ISIA-12110-B-03

MATERIAL / SUBJECT OF INSPECTION

ITEM TAG No	QTY	QTY Checked for Inspection
Item 107	01	01

A - INSPECTION RESULT

Satisfactory (Without comments) Satisfactory with comments (List of missing Parts or Non Conformity Items is still open) Not Satisfactory (List of missing Parts or Non Conformity Items is still open)

Inspection Summary: (For information to the client)

- At the request of W/S STRATEGIC DIVING EQUIPMENT HEAD without the presence of Field, pneumatic test was carried out at working pressure of 14.06 MPa and results were found satisfactory.
- High Pressure Lines were checked and 60 MPa rated low pressure (6.33) psi certified TRITON 367.

Open Non Conformities: None Yes No
 Upright NCRs Issued: None Yes No
 Release Note Issued: None Yes No
 BV Accessibility: Yes No

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E - INSPECTION DETAILS

E1 - Details of Witness (W) & Hold (H) Inspection Points

- Pressure test was witnessed for TRITON 367 Three Diver Panel for 14.06 MPa (203.4 PSI).
- Pressure test was witnessed for TRITON 367 Three Diver Panel for 14.06 MPa (203.4 PSI).
- Verification of Calibration Certificates for the measuring instruments and access points were found in order.

E2 - Details of Non Testing and Surveillance Points

- Visual inspection of Three Diver Panel was as per procedure and found satisfactory at the time of inspection.
- Verification of serial number TRITON 367 was clearly inspected and found satisfactory.
- Final test was witnessed over three diver panels and no pressure drop or leakage was observed and found satisfactory.
- Verification of calibration certificates for the measuring instruments were found in order.

E3 - Details of Certificate Numbers

- Calibration certificates of all measuring instruments used were verified and found satisfactory.

F - HEALTH, SAFETY & ENVIRONMENT COMMENTS
(Comment on Observations and Actions Taken During the Inspection)

- Follow proper safety practices during inspection period and found satisfactory.

G - NON CONFORMITIES

Item	Description	Status	Resolution	Resolution of Non-Conformity (NCR) No.	Report No.	Issue No.	Comments
Nil							

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INSPECTION REPORT No: ISIA-12110-B-03
Revision No: 0

BV Inspector: V. Raju
BV Coordinator: Subhrajit Paul
BY Office: Dubai
Inspection Report Date: 14.06.2020

CLIENT: W/S STRATEGIC DIVING EQUIPMENT SOLUTIONS FZC
MANUFACTURER: TRITON 367

B - REFERENCE DOCUMENTATION

Title	Reference No.	Rev.	Approved by	Date
TRITON 367	001	01	Subhrajit Paul	14.06.2020

C - ATTENDERS

Name	Position	Representing
Mr. V. Raju	Technical Inspector	Bureau Veritas
Mr. Subhrajit Paul	QC Engineer	Strategic Diving and Equipment
Mr. Subhrajit Paul	Technical Manager	Strategic Diving and Equipment

D - MEASURING & TESTING EQUIPMENT USED

Equipment Type	Equipment Identity No.	Last Calibration Date	Expiry Date
Digital Pressure Gauge	9543	30.11.2019	29.11.2020

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J - ATTACHMENTS

Item	Attachment Name	Total Pages	Description
1	2018 Safety Check List	0	Device Checklist
2	Calibration Certificate	0	Spring Test Report
3	Calibration Certificate	0	Certificate of Weight

APPENDIX

Description: Three Diver Panel and 3rd Quad - 146
Country of Origin: USA
Manufacturer: TRITON 367
Year of Manufacture: 2019
Design Pressure: 14.06 MPa / 203.4 PSI
Test Pressure: 14.06 MPa / 203.4 PSI

Pneumatic Test Details

- Pneumatic test was witnessed for Three Diver Panels (Serial No. TRITON 367) was witnessed as per design procedure.
- High pressure supplied to the panel was 14.06 MPa (design pressure being 14.06 MPa).
- High pressure supplied to the panel was as per design procedure (14.06 MPa).
- Over pressure on the panel was held for 30 minutes duration, during the procedure, there were no leaks or burst found satisfactory.
- Seem Solution test was performed on fittings, valves, joints and 3rd Quad 146 showing no indications of leakage and found satisfactory.

ORDERING INFORMATION

Sr.	Part Number	Description
1	SY-3DCPD023-R-3DV-3M	THREE DIVER AIR PANEL, WITH 1 X AMRON RADIOS, D1 / D2 / D3 VIDEO SYSTEMS
2	SY-3DCPD023-R-2DV-2M	THREE DIVER AIR PANEL WITH 1 X AMRON RADIOS, D1 / D2 VIDEO SYSTEMS
3	SY-3DCPD023-R-1DV-1M	THREE DIVER AIR PANEL WITH 1 X AMRON RADIOS, D1 VIDEO SYSTEMS
4	SY-3DCPD023-R	THREE DIVER AIR PANEL WITH 1X AMRON RADIOS (NO CCTV)
5	SY-3DCPD023	THREE DIVER AIR PANEL (NO RADIO , NO CCTV)

BESPOKE DESIGNS – ANY CONFIGURATION AS PER CLIENT REQUIREMENT

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