

Manufacturer: Henry Williams Ltd

Issue : 3
Valid From : 03/04/2023
Review Date: 03/04/2028

Class II Hybrid FSP Annexe for Signalling Power Supply Distribution Systems

Product Description

A Class II Hybrid FSP Annexe suitable for fitment to signalling apparatus housings without additional foundation requirements.

The Class II Hybrid Annexe is available in the following configurations:

- FSP 02/04 Switchgear in accordance to NR/L2/SIGELP/27409 Issue 2 – Product Specification for Functional Supply Points
- Signalling transformers in accordance to NR/L2/SIGELP/30007 Issue 3 – Product Specification for Power Transformers for Signalling Systems
- Installation Accessories

Product Image



Original Product

Alternative Version

Scope of Acceptance: Full Acceptance

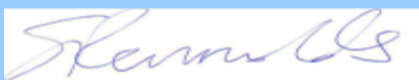
Class II Hybrid FSP Annexe comprising switchgear Type 02 and 04 in accordance with NR/L2/SIGELP/27409 Issue 2 – Product Specification for Functional Supply Points; for use in Signalling Power Distribution Systems with radial (manual) reconfigurable topology.

Suitable for attachment to existing signalling apparatus housing which have been assessed for suitability for installation of an FSP Annexe by appropriate survey.

FSP Annexe comprising Switchgear type FSP04 is suitable for use as a direct replacement for Class I switchgear and for use in radial circuits where asset plans do not exist for enhancements to manually reconfigurable systems. Suitable for connection with Aluminium cable, where applicable connectors shall be in accordance with NR/L2/SIGELP/27243 - Product Specification for Connectors and joints for Signalling Power Cables

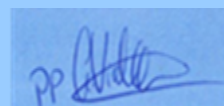
Network Rail Acceptance Panel (NRAP) hereby authorises the product above for use and trial use on railway infrastructure for which Network Rail is the Infrastructure Manager under the ROGS regulations.

Reviewed by:

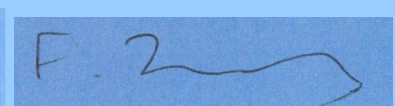


Steve Rennolds
Product Acceptance Specialist

Authorised by:



Jerry Morling
Network Technical Head of
Signalling



Felix Langley
Network Technical Head of
Power Distribution (HV/LV)

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Specific Conditions

The following Conditions are specific to the approved product/s contained within this Certificate. These conditions must be adhered to in addition to the Network Rail General Conditions contained within the "General Terms and Conditions" section.

Failure to adhere to these conditions may result in the withdrawal or suspension of Acceptance of some, or all of the items contained within the accepted configuration.

Manufacturer

- 1) See General Terms and Conditions
- 2) Compliance with applicable Network Rail PA05/06505 Acceptance requirements
- 3) Each Class II Hybrid FSP Annexe shall be tested in accordance with section 9.2 Insulating materials or coatings, of NR/L2/SIGELP/27409 Issue 2 (Class II Dielectric Test).
- 4) Test records along with photographs of each Class II Hybrid FSP Annexe shall be maintained for traceability of Class II tests.
- 5) The routine test certificate for each Class II Hybrid FSP Annexe shall be provided at the time of procurement.
- 6) Each Class II Hybrid FSP Annexe shall be individually serial numbered and shall be accompanied by a certificate of conformity.
- 7) Each Class II Hybrid FSP Annexe shall come with a laminated sheet containing the following:
 - The tool list
 - Health and safety information
- 8) The supplier shall provide support in failure investigation and analysis.

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User



- 1) Class II Hybrid FSP Annexe product range detailed in the system configuration are suitable for use as FSP Switchgear Assemblies in accordance with NR/L2/SIGELP/27409 Issue 2
- 2) The Class II Hybrid FSP Annexe shall only be installed to an existing enclosure which has been deemed suitable by survey. The survey requirements shall be agreed between the route asset manager (RAM), manufacturer and the installation contractor.
The survey at a minimum shall include:
 - Ground suitability;
 - Existing enclosure skin suitability and;
 - Existing enclosure vertical, axial and longitudinal loading stability
- 3) The Annexe shall be installed in accordance with the Installation and Operations Manual O&M Manual HWLCFSP04
- 3) The Annexe shall not be installed where access will cause a risk to safety including:
 - Areas of restricted or limited clearance;
 - Tunnels; and
 - Non-metallic enclosures (including wooden enclosures)
- 4) Where a Class II FSP Annexe is used in a Class I installation, it shall be in accordance with NR/L2/SIGELP/27410 Issue 2.
- 5) The switchgear assemblies and transformers forming part of the installation shall be product approved for use on Network Rail infrastructure.
- 6) Class II Hybrid FSP switchgear and cable connection boxes shall interface with flexible conduits and glands in accordance with NR/L2/SIGELP/27421 and NR/L2/SIGELP/27422.
- 7) Installed terminals within the Class II Hybrid FSP Annexe product range are suitable for 2-core feeder cables in the range 6 to 120mm² in Al or Cu depending on model selected. 120mm² is the maximum cable cross sectional area permitted.
- 8) Equipment and material used in the installation of the Class II Hybrid FSP Annexe shall not have detrimental effect to:
 - Existing enclosure
 - Environment
 - People
- 9) The existing enclosure condition shall be inspected before each installation to verify survey data.

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Product Configuration

Class II Hybrid FSP housing assemblies

Part No.	Description	Image	Catalogue No
Legacy Connect Model LC0.51	<p>FSP04 CLASS II (LEGACY) 500VA SYSTEM WITH ONE FUNCTIONAL 110V SWITCHED/FUSED SUPPLY.</p> <p>Complete Enclosure Assembly in coated 3mm Aluminium with the following features;</p> <ul style="list-style-type: none"> • Mounted to existing location case (side). • Ingress to IP54, Impact tested to IK10. • Class II switchgear/termination enclosure with Rotary Switches (690VAC 80A max). • Incoming feeder cable size up to 120mm² Cu or Al. • Integrated cable clamping bar and removable base plate. • BS88 fuse protection (CAMaster) for Transformer Primary. • Outgoing 110V functional supply cable sizes 0.5 - 10mm². • Fully enclosed (NR approved) Hybrid Class II 500VA Transformer. 		0054/212938
Legacy Connect Model LC1.01	<p>FSP04 CLASS II (LEGACY) 1000VA WITH ONE FUNCTIONAL 110V SWITCHED & FUSED SUPPLY.</p> <p>Complete Enclosure Assembly in coated 3mm Aluminium with the following features;</p> <ul style="list-style-type: none"> • Mounted to existing location case (side). • Ingress to IP54, Impact tested to IK10. • Class II switchgear/termination enclosure with Rotary Switches (690VAC 80A max). • Incoming feeder cable size up to 120mm² Cu or Al. • Integrated cable clamping bar and removable base plate. • BS88 fuse protection (CAMaster) for Transformer Primary. • Outgoing 110V functional supply cable sizes 0.5 - 10mm². • Fully enclosed (NR approved) Hybrid Class II 1000VA Transformer. 		0054/212939



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<p>Legacy Connect Model LC1.51</p>	<p>FSP04 CLASS II (LEGACY) 1500VA WITH ONE FUNCTIONAL 110V SWITCHED & FUSED SUPPLY. Complete Enclosure Assembly in coated 3mm Aluminium with the following features;</p> <ul style="list-style-type: none"> • Mounted to existing location case (side). • Ingress to IP54, Impact tested to IK10. • Class II switchgear/termination enclosure with Rotary Switches (690VAC 80A max). • Incoming feeder cable size up to 120mm² Cu or Al. • Integrated cable clamping bar and removable base plate. • BS88 fuse protection (CAMaster) for Transformer Primary. • Outgoing 110V functional supply cable sizes 0.5 - 10mm². <p>Fully enclosed (NR approved) Hybrid Class II 1500VA Transformer.</p>		<p>0054/212940</p>
<p>Legacy Connect Model LC2.01</p>	<p>FSP04 CLASS II (LEGACY) 2000VA WITH ONE FUNCTIONAL 110V SWITCHED & FUSED SUPPLY. Complete Enclosure Assembly in coated 3mm Aluminium with the following features;</p> <ul style="list-style-type: none"> • Mounted to existing location case (side). • Ingress to IP54, Impact tested to IK10. • Class II switchgear/termination enclosure with Rotary Switches (690VAC 80A max). • Incoming feeder cable size up to 120mm² Cu or Al. • Integrated cable clamping bar and removable base plate. • BS88 fuse protection (CAMaster) for Transformer Primary. • Outgoing 110V functional supply cable sizes 0.5 - 10mm². <p>Fully enclosed (NR approved) Hybrid Class II 2000VA Transformer.</p>		<p>0054/212941</p>



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<p>Legacy Connect Model LC3.01</p>	<p>FSP04 CLASS II (LEGACY) 3000VA WITH ONE FUNCTIONAL 110V SWITCHED & FUSED SUPPLY.</p> <p>Complete Enclosure Assembly in coated 3mm Aluminium with the following features;</p> <ul style="list-style-type: none"> • Mounted to existing location case (side). • Ingress to IP54, Impact tested to IK10. • Class II switchgear/termination enclosure with Rotary Switches (690VAC 80A max). • Incoming feeder cable size up to 120mm² Cu or Al. • Integrated cable clamping bar and removable base plate. • BS88 fuse protection (CAMaster) for Transformer Primary. • Outgoing 110V functional supply cable sizes 0.5 - 10mm². <p>Fully enclosed (NR approved) Hybrid Class II 3000VA Transformer.</p>		<p>0054/212942</p>
<p>Legacy Connect Model LC20.51</p>	<p>FSP02 CLASS II (RING FEED) 500VA WITH ONE FUNCTIONAL 110V SWITCHED & FUSED SUPPLY.</p> <p>Complete Enclosure Assembly in coated 3mm Aluminium with the following features;</p> <ul style="list-style-type: none"> • Mounted to existing location case (side). • Ingress to IP54, Impact tested to IK10. • Class II switchgear/termination enclosure with Rotary Switches (690VAC 80A max). • Incoming feeder cable size up to 120mm² Cu or Al. • Integrated cable clamping bar and removable base plate. • BS88 fuse protection (CAMaster) for Transformer Primary. • Outgoing 110V functional supply cable sizes 0.5 - 10mm². <p>Fully enclosed (NR approved) Hybrid Class II 500VA Transformer.</p>		<p>0054/212943</p>



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<p>Legacy Connect Model LC21.01</p>	<p>FSP02 CLASS II (RING FEED) 1000VA WITH ONE FUNCTIONAL 110V SWITCHED & FUSED SUPPLY.</p> <p>Complete Enclosure Assembly in coated 3mm Aluminium with the following features;</p> <ul style="list-style-type: none"> • Mounted to existing location case (side). • Ingress to IP54, Impact tested to IK10. • Class II switchgear/termination enclosure with Rotary Switches (690VAC 80A max). • Incoming feeder cable size up to 120mm² Cu or Al. • Integrated cable clamping bar and removable base plate. • BS88 fuse protection (CAMaster) for Transformer Primary. • Outgoing 110V functional supply cable sizes 0.5 - 10mm². <p>Fully enclosed (NR approved) Hybrid Class II 1000VA Transformer.</p>		<p>0054/212944</p>
<p>Legacy Connect Model LC21.51</p>	<p>FSP02 CLASS II (RING FEED) 1500VA WITH ONE FUNCTIONAL 110V SWITCHED & FUSED SUPPLY.</p> <p>Complete Enclosure Assembly in coated 3mm Aluminium with the following features;</p> <ul style="list-style-type: none"> • Mounted to existing location case (side). • Ingress to IP54, Impact tested to IK10. • Class II switchgear/termination enclosure with Rotary Switches (690VAC 80A max). • Incoming feeder cable size up to 120mm² Cu or Al. • Integrated cable clamping bar and removable base plate. • BS88 fuse protection (CAMaster) for Transformer Primary. • Outgoing 110V functional supply cable sizes 0.5 - 10mm². <p>Fully enclosed (NR approved) Hybrid Class II 1500VA Transformer.</p>		<p>0054/212945</p>

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<p>Legacy Connect Model LC22.01</p>	<p>FSP02 CLASS II (RING FEED) 2000VA WITH ONE FUNCTIONAL 110V SWITCHED & FUSED SUPPLY. Complete Enclosure Assembly in coated 3mm Aluminium with the following features;</p> <ul style="list-style-type: none"> • Mounted to existing location case (side). • Ingress to IP54, Impact tested to IK10. • Class II switchgear/termination enclosure with Rotary Switches (690VAC 80A max). • Incoming feeder cable size up to 120mm² Cu or Al. • Integrated cable clamping bar and removable base plate. • BS88 fuse protection (CAMaster) for Transformer Primary. • Outgoing 110V functional supply cable sizes 0.5 - 10mm². <p>Fully enclosed (NR approved) Hybrid Class II 2000VA Transformer.</p>		<p>0054/212946</p>
<p>Legacy Connect Model LC23.01</p>	<p>FSP02 CLASS II (RING FEED) 3000VA WITH ONE FUNCTIONAL 110V SWITCHED & FUSED SUPPLY. Complete Enclosure Assembly in coated 3mm Aluminium with the following features;</p> <ul style="list-style-type: none"> • Mounted to existing location case (side). • Ingress to IP54, Impact tested to IK10. • Class II switchgear/termination enclosure with Rotary Switches (690VAC 80A max). • Incoming feeder cable size up to 120mm² Cu or Al. • Integrated cable clamping bar and removable base plate. • BS88 fuse protection (CAMaster) for Transformer Primary. • Outgoing 110V functional supply cable sizes 0.5 - 10mm². <p>Fully enclosed (NR approved) Hybrid Class II 3000VA Transformer.</p>		<p>0054/212947</p>
<p>Accessories</p>	<ul style="list-style-type: none"> • FIXING KIT (SUPPLIED). 		<p>0054/212948</p>
	<ul style="list-style-type: none"> • ADJUSTABLE MEMBRANE GLANDS (3 OFF SUPPLIED) 		<p>0054/212949</p>



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Alternative Version Class II FSP Housing Assemblies – Issue 2

Part No.	Description	Image	Catalogue No
<p>SafeBox Legacy Connect Short Power Annexe (Model LCS0.51)</p>	<p>FSP04 CLASS II (LEGACY) 500VA SYSTEM WITH ONE FUNCTIONAL 110V SWITCHED/FUSED SUPPLY FOR 2-CORE POWER CABLES. Complete Enclosure Assembly in coated 3mm Aluminium with the following features;</p> <ul style="list-style-type: none"> • Mounted to existing location case (side) direct to HW case or using bracket (see Universal Annexe Mount UMB01). • Designed Ingress to IP54, Impact to IK10. • Class II switchgear/termination enclosure with Rotary Switches (690VAC 80A max). • Incoming/outgoing 2-core feeder cables size up to 120mm² Cu or Al. • Integrated cable clamping bar and removable base plate. • BS88 fuse protection for transformer primary supply. • Outgoing 110V functional supply cable sizes 0.5 - 10mm². • Fully enclosed (NR approved) Hybrid Class II Transformer. 		<p>0054/213074</p>
<p>SafeBox Legacy Connect Short Power Annexe (Model LCS1.01)</p>	<p>FSP04 CLASS II (LEGACY) 1.0KVA SYSTEM WITH ONE FUNCTIONAL 110V SWITCHED/FUSED SUPPLY FOR 2-CORE POWER CABLES. Complete Enclosure Assembly in coated 3mm Aluminium with the following features;</p> <ul style="list-style-type: none"> • Mounted to existing location case (side) direct to HW case or using bracket (see Universal Annexe Mount UMB01). • Designed Ingress to IP54, Impact to IK10. • Class II switchgear/termination enclosure with Rotary Switches (690VAC 80A max). • Incoming/outgoing 2-core feeder cables size up to 120mm² Cu or Al. • Integrated cable clamping bar and removable base plate. • BS88 fuse protection for transformer primary supply. • Outgoing 110V functional supply cable sizes 0.5 - 10mm². • Fully enclosed (NR approved) Hybrid Class II Transformer. 		<p>0054/213075</p>

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<p>SafeBox Legacy Connect Short Power Annexe (Model LCS1.51)</p>	<p>FSP04 CLASS II (LEGACY) 1.5KVA SYSTEM WITH ONE FUNCTIONAL 110V SWITCHED/FUSED SUPPLY FOR 2-CORE POWER CABLES. Complete Enclosure Assembly in coated 3mm Aluminium with the following features;</p> <ul style="list-style-type: none"> • Mounted to existing location case (side) direct to HW case or using bracket (see Universal Annexe Mount UMB01). • Designed Ingress to IP54, Impact to IK10. • Class II switchgear/termination enclosure with Rotary Switches (690VAC 80A max). • Incoming/outgoing 2-core feeder cables size up to 120mm² Cu or Al. • Integrated cable clamping bar and removable base plate. • BS88 fuse protection for transformer primary supply. • Outgoing 110V functional supply cable sizes 0.5 - 10mm². • Fully enclosed (NR approved) Hybrid Class II Transformer. 		<p>0054/213076</p>
<p>SafeBox Legacy Connect Short Power Annexe (Model LCS2.01)</p>	<p>FSP04 CLASS II (LEGACY) 2.0KVA SYSTEM WITH ONE FUNCTIONAL 110V SWITCHED/FUSED SUPPLY FOR 2-CORE POWER CABLES. Complete Enclosure Assembly in coated 3mm Aluminium with the following features;</p> <ul style="list-style-type: none"> • Mounted to existing location case (side) direct to HW case or using bracket (see Universal Annexe Mount UMB01). • Designed Ingress to IP54, Impact to IK10. • Class II switchgear/termination enclosure with Rotary Switches (690VAC 80A max). • Incoming/outgoing 2-core feeder cables size up to 120mm² Cu or Al. • Integrated cable clamping bar and removable base plate. • BS88 fuse protection for transformer primary supply. • Outgoing 110V functional supply cable sizes 0.5 - 10mm². • Fully enclosed (NR approved) Hybrid Class II Transformer. 		<p>0054/213077</p>

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<p>SafeBox Legacy Connect Short Power Annexe (Model LCS3.01)</p>	<p>FSP04 CLASS II (LEGACY) 3.0KVA SYSTEM WITH ONE FUNCTIONAL 110V SWITCHED/FUSED SUPPLY FOR 2-CORE POWER CABLES. Complete Enclosure Assembly in coated 3mm Aluminium with the following features;</p> <ul style="list-style-type: none"> • Mounted to existing location case (side) direct to HW case or using bracket (see Universal Annexe Mount UMB01). • Designed Ingress to IP54, Impact to IK10. • Class II switchgear/termination enclosure with Rotary Switches (690VAC 80A max). • Incoming/outgoing 2-core feeder cables size up to 120mm² Cu or Al. • Integrated cable clamping bar and removable base plate. • BS88 fuse protection for transformer primary supply. • Outgoing 110V functional supply cable sizes 0.5 - 10mm². • Fully enclosed (NR approved) Hybrid Class II Transformer. 		<p>0054/213078</p>
<p>Safebox Legacy Connect Short Power Annexe Model LCS20.51</p>	<p>FSP02 CLASS II (LEGACY) 500VA SYSTEM WITH ONE FUNCTIONAL 110V SWITCHED/FUSED SUPPLY FOR 2-CORE POWER CABLES. Complete Enclosure Assembly in coated 3mm Aluminium with the following features;</p> <ul style="list-style-type: none"> • Mounted to existing location case (side) direct to HW case or using bracket (see Universal Annexe Mount UMB01). • Designed Ingress to IP54, Impact to IK10. • Class II switchgear/termination enclosure with Rotary Switches (690VAC 80A max). • Incoming/outgoing 2-core feeder cables size up to 120mm² Cu or Al. • Integrated cable clamping bar and removable base plate. • BS88 fuse protection for transformer primary supply. • Outgoing 110V functional supply cable sizes 0.5 - 10mm². • Fully enclosed (NR approved) Hybrid Class II Transformer 		<p>0054/215104</p>

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<p>Safebox Legacy Connect Short Power Annexe Model LCS21.01</p>	<p>FSP02 CLASS II (LEGACY) 1000VA SYSTEM WITH ONE FUNCTIONAL 110V SWITCHED/FUSED SUPPLY FOR 2-CORE POWER CABLES. Complete Enclosure Assembly in coated 3mm Aluminium with the following features;</p> <ul style="list-style-type: none"> • Mounted to existing location case (side) direct to HW case or using bracket (see Universal Annexe Mount UMB01). • Designed Ingress to IP54, Impact to IK10. • Class II switchgear/termination enclosure with Rotary Switches (690VAC 80A max). • Incoming/outgoing 2-core feeder cables size up to 120mm² Cu or Al. • Integrated cable clamping bar and removable base plate. • BS88 fuse protection for transformer primary supply. • Outgoing 110V functional supply cable sizes 0.5 - 10mm². • Fully enclosed (NR approved) Hybrid Class II Transformer 		<p>0054/215105</p>
<p>Safebox Legacy Connect Short Power Annexe Model LCS21.51</p>	<p>FSP02 CLASS II (LEGACY) 1500VA SYSTEM WITH ONE FUNCTIONAL 110V SWITCHED/FUSED SUPPLY FOR 2-CORE POWER CABLES. Complete Enclosure Assembly in coated 3mm Aluminium with the following features;</p> <ul style="list-style-type: none"> • Mounted to existing location case (side) direct to HW case or using bracket (see Universal Annexe Mount UMB01). • Designed Ingress to IP54, Impact to IK10. • Class II switchgear/termination enclosure with Rotary Switches (690VAC 80A max). • Incoming/outgoing 2-core feeder cables size up to 120mm² Cu or Al. • Integrated cable clamping bar and removable base plate. • BS88 fuse protection for transformer primary supply. • Outgoing 110V functional supply cable sizes 0.5 - 10mm². • Fully enclosed (NR approved) Hybrid Class II Transformer 		<p>0054/215106</p>

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<p>Safebox Legacy Connect Short Power Annexe Model LCS22.01</p>	<p>FSP02 CLASS II (LEGACY) 2000VA SYSTEM WITH ONE FUNCTIONAL 110V SWITCHED/FUSED SUPPLY FOR 2-CORE POWER CABLES. Complete Enclosure Assembly in coated 3mm Aluminium with the following features;</p> <ul style="list-style-type: none"> • Mounted to existing location case (side) direct to HW case or using bracket (see Universal Annexe Mount UMB01). • Designed Ingress to IP54, Impact to IK10. • Class II switchgear/termination enclosure with Rotary Switches (690VAC 80A max). • Incoming/outgoing 2-core feeder cables size up to 120mm² Cu or Al. • Integrated cable clamping bar and removable base plate. • BS88 fuse protection for transformer primary supply. • Outgoing 110V functional supply cable sizes 0.5 - 10mm². • Fully enclosed (NR approved) Hybrid Class II Transformer 		<p>0054/215107</p>
<p>SafeBox Legacy Connect Short Power Annexe (Model LCS40.01)</p>	<p>FSP04 CLASS II (LEGACY) 500VA SYSTEM WITH ONE FUNCTIONAL 110V SWITCHED/FUSED SUPPLY FOR 4-CORE POWER CABLES. Complete Enclosure Assembly in coated 3mm Aluminium with the following features;</p> <ul style="list-style-type: none"> • Mounted to existing location case (side) direct to HW case or using bracket (see Universal Annexe Mount UMB01). • Designed Ingress to IP54, Impact to IK10. • Class II switchgear/termination enclosure with Rotary Switches (690VAC 80A max). • Incoming/outgoing 4-core feeder cables size up to 120mm² Cu or Al. • Integrated cable clamping bar and removable base plate. • BS88 fuse protection for transformer primary supply. • Outgoing 110V functional supply cable sizes 0.5 - 10mm². • Fully enclosed (NR approved) Hybrid Class II Transformer. 		<p>0054/213079</p>



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<p>SafeBox Legacy Connect Short Power Annexe (Model LCS41.01)</p>	<p>FSP04 CLASS II (LEGACY) 1.0KVA SYSTEM WITH ONE FUNCTIONAL 110V SWITCHED/FUSED SUPPLY FOR 4-CORE POWER CABLES. Complete Enclosure Assembly in coated 3mm Aluminium with the following features;</p> <ul style="list-style-type: none"> • Mounted to existing location case (side) direct to HW case or using bracket (see Universal Annexe Mount UMB01). • Designed Ingress to IP54, Impact to IK10. • Class II switchgear/termination enclosure with Rotary Switches (690VAC 80A max). • Incoming/outgoing 4-core feeder cables size up to 120mm² Cu or Al. • Integrated cable clamping bar and removable base plate. • BS88 fuse protection for transformer primary supply. • Outgoing 110V functional supply cable sizes 0.5 - 10mm². • Fully enclosed (NR approved) Hybrid Class II Transformer. 		<p>0054/213080</p>
<p>SafeBox Legacy Connect Short Power Annexe (Model LCS41.51)</p>	<p>FSP04 CLASS II (LEGACY) 1.5KVA SYSTEM WITH ONE FUNCTIONAL 110V SWITCHED/FUSED SUPPLY FOR 4-CORE POWER CABLES. Complete Enclosure Assembly in coated 3mm Aluminium with the following features;</p> <ul style="list-style-type: none"> • Mounted to existing location case (side) direct to HW case or using bracket (see Universal Annexe Mount UMB01). • Designed Ingress to IP54, Impact to IK10. • Class II switchgear/termination enclosure with Rotary Switches (690VAC 80A max). • Incoming/outgoing 4-core feeder cables size up to 120mm² Cu or Al. • Integrated cable clamping bar and removable base plate. • BS88 fuse protection for transformer primary supply. • Outgoing 110V functional supply cable sizes 0.5 - 10mm². • Fully enclosed (NR approved) Hybrid Class II Transformer. 		<p>0054/213081</p>

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<p>SafeBox Legacy Connect Short Power Annexe (Model LCS42.01)</p>	<p>FSP04 CLASS II (LEGACY) 2.0KVA SYSTEM WITH ONE FUNCTIONAL 110V SWITCHED/FUSED SUPPLY FOR 4-CORE POWER CABLES. Complete Enclosure Assembly in coated 3mm Aluminium with the following features;</p> <ul style="list-style-type: none"> • Mounted to existing location case (side) direct to HW case or using bracket (see Universal Annexe Mount UMB01). • Designed Ingress to IP54, Impact to IK10. • Class II switchgear/termination enclosure with Rotary Switches (690VAC 80A max). • Incoming/outgoing 4-core feeder cables size up to 120mm² Cu or Al. • Integrated cable clamping bar and removable base plate. • BS88 fuse protection for transformer primary supply. • Outgoing 110V functional supply cable sizes 0.5 - 10mm². • Fully enclosed (NR approved) Hybrid Class II Transformer. 		<p>0054/213082</p>
<p>SafeBox Legacy Connect Short Power Annexe (Model LCS43.01)</p>	<p>FSP04 CLASS II (LEGACY) 3.0KVA SYSTEM WITH ONE FUNCTIONAL 110V SWITCHED/FUSED SUPPLY FOR 4-CORE POWER CABLES. Complete Enclosure Assembly in coated 3mm Aluminium with the following features;</p> <ul style="list-style-type: none"> • Mounted to existing location case (side) direct to HW case or using bracket (see Universal Annexe Mount UMB01). • Designed Ingress to IP54, Impact to IK10. • Class II switchgear/termination enclosure with Rotary Switches (690VAC 80A max). • Incoming/outgoing 4-core feeder cables size up to 120mm² Cu or Al. • Integrated cable clamping bar and removable base plate. • BS88 fuse protection for transformer primary supply. • Outgoing 110V functional supply cable sizes 0.5 - 10mm². • Fully enclosed (NR approved) Hybrid Class II Transformer. 		<p>0054/213083</p>

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New Products – Issue 2

Part No.	Description	Image	Catalogue No
<p>SafeBox Legacy Connect Powerbox (Class II) (Model SL22/A4C)</p>	<p>SAFEBOX (Class II) LEGACY CONNECT ENCLOSURE WITH ONE FUNCTIONAL SUPPLY. SUITABLE FOR 4-Core POWER CABLES. Designed to mount directly inside the Power Annexe enclosure with the following features;</p> <ul style="list-style-type: none"> • Works with Ring (FSP02) or Legacy (FSP04) power circuits using 4-core cables. • Incoming/Outgoing 4-core feeder cables size up to 120mm² Copper or Aluminium. • Individual removeable gland plates for each feeder cable. • Isolator and fused protection for functional transformer 650V primary supply. • Designed Ingress to IP44, Impact to IK09. • Class II switchgear/termination enclosure with Rotary Switches (690VAC 80A max). 		<p>0054/213084</p>
<p>Universal Power Annexe Mounting Bracket (Model UMB01)</p>	<p>UNIVERSAL ANNEXE MOUNTING BRACKET (UMB01). Complete Mounting Bracket set with the following features;</p> <ul style="list-style-type: none"> • Can be fitted to a full or half sized location case in approx 20 mins. • Designed to be site adjustable to fit the majority of location case designs. • Manufactured from Stainless Steel. • Rugged welded construction. • Provides integrated cable clamping bar arrangement. • Provides mounting for tall or short version of Power Annexe enclosure. • Complete with all fittings and fixings required. 		<p>0054/213085</p>

Manufacturer: Henry Williams Ltd

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Hardware (Maintenance Spares and Line Replaceable Units)

Part No.	Description		Catalogue No.
HaAssMaM10/10.P	EARTH TERMINALS	ABB Entelec	0054/212953
ML10/13.SN	DISCONNECT LINK HOLDER (BLUE LEVER)	ABB Entelec	0054/212954
ML10/13.SF	FUSE HOLDER (BLACK LEVER)	ABB Entelec	0054/212955
M10/10	THROUGH TERMINAL	ABB Entelec	0054/212956
NSYECPC9	ADJUSTABLE MEMBRANE GLAND	Schneider Electric	0054/212957
CON-439	ROUND INSERT 10MM HOLE (REF 111113 MID GREY) REAR FIXING HOLE INSERTS	Henry Williams	0054/212958

Hardware (Maintenance Spares and Line Replaceable Units) – Issue 2

Part No.	Description		Catalogue No.
2017.047-A1-001	Legacy Connect Power Annexe Enclosure (Short Version)	Henry Williams Ltd.	0054/213086
2017.061-A1-001	SAFEBOX LEGACY SL22/A4C (COMPLETE UNIT)	Henry Williams Ltd.	0054/213087
13975	110V TERMINAL ENCLOSURE	Schneider Electric	0054/213088
2018.006-A1-000	Universal Mounting Bracket (UMB01)	Henry Williams Ltd.	0054/213089

Manufacturer: Henry Williams Ltd

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Assessed Documentation

Reference	Title	Doc. Rev.	Date and Applies to Cert. issue No.	
Class II Hybrid FSP Annexe	Product Configuration – System or Complete Assembly	-	18/01/2017	1
Annexe A	<ul style="list-style-type: none"> A1 – BS EN ISO 9001 A2 – BS EN 14001 	<ul style="list-style-type: none"> 06/10/2015 08/05/2013 	18/01/2017	1
Annexe B	Product Detail Drawings: <ul style="list-style-type: none"> SafeBox Model SL11/C (Already NWR Approved) SafeBox Legacy Connect Wiring Drawings SafeBox Legacy Connect Mechanical, GA, and Fixing Drawings 	Various	18/01/2017	1
Annexe C	Operation & Maintenance Manual	1.1	18/01/2017	1
Annexe D	Product Datasheets	Various	18/01/2017	1
Annexe E	SafeBox Legacy Connect Installation Report	1.0	18/01/2017	1
Annexe F	Network Rail Approval Certificates: Henry Williams Compact Series (Class II) MA Conduit and Fittings TL Transformers	Various	18/01/2017	1
Annexe G	Independent report of Heat Run tests with max 3KVA transformer in power annexe enclosure (Carried out by ATL transformers).	21/07/2016	18/01/2017	1
Annexe H	SafeBox CE Certificate of Conformity	8.0	18/01/2017	1
Annexe J	Investigation of the effects of mounting a Location Extender Cubicle (Power Annexe) onto a Type A Location case	18/12/2015	18/01/2017	1
Annexe K	Location Case paint compliance report	001-V1	18/01/2017	1
Annexe L	Failure Modes & Effects Analysis (FMEA) Sheet	June 2016	18/01/2017	1
Annexe M	Lifetime Product Support – Henry Williams Statement	1.0	18/01/2017	1
Annexe N	Testing Reports: <ul style="list-style-type: none"> N1 – Mechanical Impact Testing N2 – IP 54 & Vibration Testing 	<ul style="list-style-type: none"> 1.0 1 	18/01/2017	1
Annexe P	MTBF, MTTR, MTBSAF statement	1.0	18/01/2017	1
Annexe R	Report detailing Metal Combinations and Galvanic Compatibility	06/07/2016	18/01/2017	1
Annexe S	Statement on Asset Life	1.0	18/01/2017	1
Annexe T	Henry Williams Factory Testing Documents: <ul style="list-style-type: none"> T1 – Functional Test & Inspection Document. T2 – Pre-delivery Checklist 	SOFEP003F-004 SOFEP009A-001	18/01/2017	1
Annexe V	Finite Element Analysis (FEA) Information.	Rev B	18/01/2017	1
Annexe W	Product Range and Weight Information	18/07/2016	18/01/2017	1

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Reference	Title	Doc. Rev.	Date and Applies to Cert. issue No.	
Annexe Z	List of Appendices for Supporting Evidence	2.0	18/01/2017	1
Annexe B	Issue 2 Drawings Update	Issue 2 update	16/11/2018	2
Annexe C	Issue 2 O&M manual update	Issue 2 update	16/11/2018	2
Annexe E	Issue 2 Installation manual update	Issue 2 update	16/11/2018	2
Annexe J	Issue 2 Mechanical integrity analysis	Issue 2 update	16/11/2018	2
Annexe V	Finite Element Analysis	Rev B	16/11/2018	2
	Email from Calvin P. Stephenson confirming SL21/R are built to same design as SL11/C and SL21/R is only approved for Long Annexe		03/04/2023	3
	Updated PADS info (03.04/2023) for SL21/R Short Annexe products		03/04/2023	3

Manuals and Training Materials

Reference	Title	Doc. Rev.	Date and Applies to Cert. issue No.	
HWLCFSP04	Operating and Maintenance Manual	1.2	18/01/2017	1
Legacy Connect O&M Manual Ver 1.4	Legacy Connect (Annexe) Range O&M Manual Ver 1.4	1.4	16/11/2018	2
UMB01	UMB01 Universal Annexe Mounting Bracket O&M Install Guide ver 2	Ver 2	16/11/2018	2

Certificate History

Issue	Date	Issue History
T1	03/10/2016	Accepted for trial assessment
1	21/11/2016	Accepted for first use after trial
2	27/11/2018	Addition of the short version Annexe and new mounting assembly
3	03/04/2023	Addition of SL21/R short version Annexe models with the addition of cat. no.s x4 xtoY (054/215104,105, 106 and 107)

Contact Details

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General Terms & Conditions

1) General

- 1) This certificate can only be amended by Network Rail Product Acceptance, the Professional Head or nominated delegate. Any alterations made by a other persons will invalidate the entire certificate.
- 2) Failure to abide by the requirements in this Certificate of Acceptance may invalidate the certificate, thereby restricting the right to operate the product and / or limiting the future supply and deployment of the product on the infrastructure.
- 3) Upon the review date this certificate and the product it relates to is invalid and not accepted for use. Manufacturers are to make an application for a review prior to the review date.

2) Manufacturer

The Manufacturer shall:

- 1) Ensure that all products supplied comply with the standards defined in the Acceptance Requirements or otherwise documented as part of the assessment, including meeting the reliability requirements included in the Acceptance Requirements and in any deed of warranty for the relevant certificate number.
- 2) Notify Network Rail Product Acceptance:
 - a. Within 48 hours, of any deficiencies affecting the quality, functionality or safety integrity of the product (including corrective action undertaken or proposed).
 - b. Of any intended change to the accepted product; changes include:
 - i. a change to the product configuration (to the actual product or its application);
 - ii. a variation to or addition of manufacturing locations or processes;
 - iii. a change in the name or ownership of the manufacturing company;
 - iv. any changes to the ability or intention to support with technical services, spares or repairs.
- 3) The Manufacturer shall provide Network Rail Product Acceptance or National Supply Chain (NSC) at least 12 (twelve) months notice of its intention to discontinue supply or to provide such notice as is reasonable if such discontinuance is outside its control and will offer the opportunity of a Last Time Buy to Network Rail together with date for last order placement and supply of the parts affected. The introduction of proposed alternative products shall be communicated to Network Rail Product Acceptance.
- 4) Provide further copies of operating and maintenance manuals to purchasers / users of the product as necessary (including certificates of conformance, calibration etc).
- 5) Provide further copies of training manuals and an appropriate level of training to purchasers or users of the product as necessary.
- 6) Where applicable, specialist technical support, repairs and servicing of the product shall be carried out by the Original Equipment Manufacturer (OEM) or authorised agent only.
- 7) Network Rail may request information from the manufacturer to prove product compliance with clauses 1 and 2 above and reserve the right to suspend and/or withdraw any application where information is not forthcoming within a reasonable timeframe.
- 8) In accordance with Network Rail's Quality Assurance Policy Statement 2011, where the specification and/or Product Acceptance Certificates specify quality assurance classifications (QA1 to QA5) for the products, the manufacturer shall comply with the specified level of quality assurance for each product and allow Network Rail access to carry out its quality assurance checks.
- 9) The manufacturer shall give Network Rail's representatives access at all reasonable times to its premises and allow them to inspect its quality systems and production methods and, if requested, to inspect, examine and test the products both during and after their manufacture and the materials being used in their manufacture.

3) Conditions of Use

Specifiers, installers, operators, maintainers, etc. using the product shall:

- 1) Comply with the certificate conditions. If a condition is not understood guidance must be sought from Network Rail Product Acceptance.
- 2) Check that the application of use complies with the relevant certificate's scope of acceptance.
- 3) Report any defect if it is a design or manufacturing fault likely to affect performance and/or the safe operation of the railway in writing to Network Rail Product Acceptance.
- 4) Inform Network Rail Product Acceptance in writing of a change to the product configuration (or to the actual product or its application).
- 5) Operate, maintain and service the product in accordance with Network Rail standards and Operation and Maintenance manuals as appropriate.
- 6) Be appropriately trained and authorised for the installation, maintenance and use of the product.
- 7) Only send products for repair or reconditioning to the Original Equipment Manufacturer (OEM) or authorised agent.
- 8) Users are to be aware that Product Acceptance is not a substitute for design approval.

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4) Compliance

Railways and Other Guided Systems (ROGS) Regulations

1) Where the product is to be used in areas where Network Rail is not the Infrastructure Manager (e.g. leased stations), the sponsor shall additionally obtain formal consent from the Infrastructure Manager for the locality where the equipment is to be installed. This may include a requirement for additional safety verification. The decision of that Infrastructure Manager is binding, and cannot be overridden by Network Rail except by the escalation processes established in the ROGS regulations

2) As required in Railway Group Standard GE/RT8270, at each use of this product the project or group responsible for installation and commissioning shall be required to demonstrate compatibility with:

- a. All rail vehicle types that have access rights over the area affected by the change
- b. Infrastructure managed by others
- c. Neighbours.

Railway Interoperability Regulations

3) For interoperable constituents of systems the project or group responsible for installation and commissioning shall be required to demonstrate compliance with the relevant Technical Specifications for Interoperability (TSI) where appropriate.

4) An authorisation from the national safety authority (i.e. the Railway Safety Directorate of the Office of Rail Regulation) is required before the equipment is to be used in revenue earning service.

5) Supply Chain Arrangements

1) Certificates of acceptance do not imply any particular quantity of supply nor any exclusivity of supply.

2) Products may be purchased by Network Rail or its agents, suppliers or contractors.

3) Manufacturers should note that it is not necessary to enter into any exclusive supply arrangements with resellers or other suppliers.