

KTB QL 987420 S4E1

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
 D-32758 Detmold
 Germany

www.weidmueller.com

Similar to illustration



Abbildung ähnlich

The Klippon® TB enclosure range provides excellent performance characteristics, even under the most difficult environmental conditions. In addition, it complies with the stricter requirements of potentially explosive atmospheres found specifically in the process or power generation industries. The Klippon® TB QL enclosure range offers further improvements to a product line that is already successfully leading the market.

The Klippon® TB QL enclosure series features the following advantages:

- Available in 19 sizes and 3 standard depths
- Equipped with up to 4 gland plates
- The gasket is protected against compression
- Quick-locking cover, comes with a slot as standard
- Improved temperature performance
- IP66 protection
- Earthing stud in the cover and base of the enclosure
- Welded mounting feet
- International approvals

General ordering data

Version	Klippon TB QL (Terminal Box - Quarter Lock), Empty enclosure, stainless steel enclosure, Height: 980 mm, Width: 740 mm, Depth: 200 mm, Gland plates: Bottom, Basic material: Stainless steel 1.4404 (316L), electropolished, silver
Order No.	1201010000
Type	KTB QL 987420 S4E1
GTIN (EAN)	4032248983476
Qty.	1 items

KTB QL 987420 S4E1

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
 D-32758 Detmold
 Germany

www.weidmueller.com

Technical data

Approvals

Approvals



ROHS	Conform
UL File Number Search	UL Website
Certificate no. (cULus)	E243298

Dimensions and weights

Depth	200 mm	Depth (inches)	7.874 inch
Height	980 mm	Height (inches)	38.5826 inch
Width	740 mm	Width (inches)	29.1338 inch
Mounting dimension - height	625 mm	Mounting dimension - width	766 mm
Net weight	29500 g		

Temperatures

Operating temperature	-60 °C...135 °C	Note: room temperature (service)	Limited to IP66 protection when used in temperatures greater than 105 °C.
-----------------------	-----------------	----------------------------------	---

Environmental Product Compliance

RoHS Compliance Status	Compliant with exemption
RoHS Exemption (if applicable/known)	6c
REACH SVHC	Lead 7439-92-1
SCIP	8d5fcdfe-c58e-44e1-a6b4-74d2bbccc9dd

Cable glands, left

M63	8	M75	6
M12	126	M50	10
M16	84	M32	26
M25	48	M20	54
M40	22		

Cable glands, right

M25	48	M63	8
M75	6	M16	84
M40	22	M50	10
M32	26	M20	54
M12	126		

Cable glands, top/bottom

M20	42	M12	96
M63	6	M40	16

KTB QL 987420 S4E1

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26
D-32758 Detmold
Germany

www.weidmueller.com

Technical data

M32	20	M25	36
M50	6	M75	4
M16	64		

Certificate numbers enclosure

Certificate No. UL Haz.Loc.	E223792	Declaration of Conformity No. (DoC LVD)	DE PS261X 160412 001ISS03
Certificate No. UL Ord.Loc.	E243298	Certificate No. UL 508A	E223801
Attestation of Conformity No. (AoC)	DE PS261X 160309 001ISS06	Certificate No. UL Terminal Box	E223792
Certificate No. Electronic Box (NEPSI)	2020322303003289	Certificate no. empty enclosure (ECAS)	21-09-25241/ E21-09-053807
Certificate no. Terminal Box (KOSHA)	16-AV4BO-0245X	Certificate no. empty enclosure (INMETRO)	LMP 21.0016U
Certificate No. (DNV)	TAE000013S	Certificate no. Terminal Box (AEx)	E223792
Certificate No. (CCOE)	P461058_1	Certificate no. Terminal Box (ATEX)	IBExU14ATEX1050
Certificate no. empty enclosure (ATEX)	IBExU14ATEX1028 U	Certificate no. Terminal Box (INMETRO)	LMP 21.0017
Certificate no. (INMETRO)	IEX13.0009	Certificate no. Terminal Box (IECEX)	IECEXIBE14.0013
Certificate no. empty enclosure (IECEX)	IECEX IBE 14.0004U	Certificate No. (IECEX)	IECEXKEM10.0020
Certificate No. (ATEX)	KEMA10ATEX0046U	Approval conditions	ATEX, CCoE, DNV, IECEX, INMETRO, KC, NEPSI, CCC, UL AEx Class Div., UL AEx Class Zone, cULus
Certificate no. (cULus)	E243298		

General information

Material thickness of cover	1.5 mm	Material thickness of flange	3 mm
Material thickness of enclosure	1.5 mm	Operating temperature, max.	135 °C
Operating temperature, min.	-60 °C	Lid attachment	Quarter-turn fastener with slotted insert
Standards	DIN EN 62208 - Empty enclosure standard, DIN EN 61373 Class 1B**, DIN EN 15085-2, EN 60079-0, EN 60079-7, EN 60079-31, IEC 60079-0, IEC 60079-7, IEC 60079-31	Surface finish	electropolished
Impact resistance	7 J ATEX version, 10 J version standard	AF size	10 mm
Protection degree	IP66	Basic material	Stainless steel 1.4404 (316L)
Seal material	Silicone	Integral fixing	4, 6 or 9 stud bolts M6 inner (female) thread
Enclosure attachment	4 welded-on mounting feet with 11 mm holes (2 slotted feet and 2 cross-shaped feet)	Note: protection class	If used in temperature ranges above 105 °C, IP protection is limited to IP 66.
Flange plate mounting	M6 hexagonal head screws 10 SW	Protection class (UL)	Type 3, Type 4X, Type 12
Gland plates	Bottom	Dimension of box	925x1130x240
Access opening: width	681 mm	Opening angle lid	130.00 °
Overall dimensions	991 x 791 x 210	Flange plate	Yes
Max. payload	290 kg	Access opening: height	927 mm
Position PE bolts	Enclosure side C	Areas of use	Explosive risk zone, Process industry, Oil and gas industry, Chemical industry, Offshore, Onshore

KTB QL 987420 S4E1

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
 D-32758 Detmold
 Germany

www.weidmueller.com

Technical data

Housing earth

Earth, enclosure, internal	Welded-on M6 stainless-steel earth stud in enclosure body and lid.
----------------------------	--

horizontal assembly

WDU 10 / ZDU 10	6x64	WDU 16 / ZDU 16	5x54
WDU 2,5 / ZDU 2,5 / IDU 2,5	9x127	WDU 35 / ZDU 35	4x40
WDU 4 / ZDU 4	8x106	WDU 6 / ZDU 6	7x80

vertical assembly

WDU 10 / ZDU 10	4x88	WDU 16 / ZDU 16	4x74
WDU 2,5 / ZDU 2,5 / IDU 2,5	6x174	WDU 35 / ZDU 35	3x55
WDU 4 / ZDU 4	6x146	WDU 6 / ZDU 6	5x110

Classifications

ETIM 8.0	EC002503	ETIM 9.0	EC002503
ETIM 10.0	EC002503	ECLASS 14.0	27-18-05-02
ECLASS 15.0	27-18-05-02		

KTB QL 987420 S4E1

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
D-32758 Detmold
Germany

Drawings

www.weidmueller.com



KTB QL 987420 S4E1

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
 D-32758 Detmold
 Germany

www.weidmueller.com

Accessories

980 x 740mm



Integrate, expand and customise: The ideal expansion for every application

The consistent structure of accessories for the new Klippon® TB enclosure range means that you can easily adapt the enclosure to the specific requirements of each application.

Mounting plates

Mounting plates, with and without hole patterns, for longitudinal and transverse mounting of DIN mounting rails or components directly onto the mounting plate.

General ordering data

Type	KTB MOPL 9874 MSZN	Version
Order No.	1194050000	Klippon TB (Terminal Box), Mounting plate, Height: 926 mm, Width:
GTIN (EAN)	4050118028645	680 mm, Depth: 12 mm, Basic material: Sheet steel, galvanized, silver
Qty.	1 ST	
Type	KTB MOPL 9874 S2N	Version
Order No.	1193920000	Klippon TB (Terminal Box), Mounting plate, Height: 926 mm, Width:
GTIN (EAN)	4050118028539	680 mm, Depth: 12 mm, Basic material: Stainless steel 1.4301 (304),
Qty.	1 ST	untreated, silver
Type	KTB MOPL 9874 MSZN H	Version
Order No.	2022760000	Klippon TB (Terminal Box), Mounting plate, prepunched, Height: 926
GTIN (EAN)	4050118403763	mm, Width: 680 mm, Depth: 12 mm, Basic material: Sheet steel,
Qty.	1 ST	galvanized, silver
Type	KTB MOPL 9874 S2N H	Version
Order No.	1257770000	Klippon TB (Terminal Box), Mounting plate, prepunched, Height: 926
GTIN (EAN)	4050118049404	mm, Width: 680 mm, Depth: 12 mm, Basic material: Stainless steel
Qty.	1 ST	1.4301 (304), untreated, silver

Gland plates without earthing studs



Integrate, expand and customise: The ideal expansion for every application

The consistent structure of accessories for the new Klippon® TB enclosure range means that you can easily adapt the enclosure to the specific requirements of each application.

Flange plates

Flange plates in two thicknesses, for easy replacement of pre-assembl

General ordering data

Type	KTB GP XX7420 AB S4 3MM	Version
Order No.	1281310000	Klippon TB (Terminal Box), flange plate, straight, Height: 353 mm,
GTIN (EAN)	4050118072037	Width: 167 mm, Depth: 3 mm, Gland plates: top, Bottom, Basic
Qty.	1 ST	material: Stainless steel 1.4404, Stainless steel 1.4404 (316L),
		electropolished, silver

KTB QL 987420 S4E1

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
 D-32758 Detmold
 Germany

www.weidmueller.com

Accessories

Gland plates made out of stainless steel - 6 mm



Integrate, expand and customise: The ideal expansion for every application

The consistent structure of accessories for the new Klippon® TB enclosure range means that you can easily adapt the enclosure to the specific requirements of each application.

Flange plates

Flange plates in two thicknesses, for easy replacement of pre-assembl

General ordering data

Type	KTB GP XX7420 AB S4 6MM	Version
Order No.	1256750000	Klippon TB (Terminal Box), flange plate, straight, Height: 353 mm,
GTIN (EAN)	4050118094053	Width: 167 mm, Depth: 6 mm, Gland plates: top, Bottom, Basic
Qty.	1 ST	material: Stainless steel 1.4404, electropolished, silver

Gland plates with earthing studs



Integrate, expand and customise: The ideal expansion for every application

The consistent structure of accessories for the new Klippon® TB enclosure range means that you can easily adapt the enclosure to the specific requirements of each application.

Flange plates

Flange plates in two thicknesses, for easy replacement of pre-assembl

General ordering data

Type	KTB GP 987420 AB S4 PE	Version
Order No.	2024560000	Klippon TB (Terminal Box), flange plate, Height: 353 mm, Width: 167
GTIN (EAN)	4050118404357	mm, Depth: 3 mm, Gland plates: top, Bottom, Basic material: Stainless
Qty.	1 ST	steel 1.4404, electropolished, silver

Stainless steel 1.4301



Integrate, expand and customise: The ideal expansion for every application

The consistent structure of accessories for the new Klippon® TB enclosure range means that you can easily adapt the enclosure to the specific requirements of each application.

Rain Covers

The rain cover provides an ideal, additional level of protection for the enclosure if it is installed in unusual climatic zones with, for instance, very heavy rainfall or extreme levels of direct sunlight.

KTB QL 987420 S4E1

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
 D-32758 Detmold
 Germany

www.weidmueller.com

Accessories

General ordering data

Type	KTB RNHD 987420 R	Version
Order No.	1281580000	Klippon TB (Terminal Box), Rain hood, Height: 55.9 mm, Width: 745 mm, Depth: 211.2 mm, Basic material: Stainless steel 1.4301, Mirror polished, silver
GTIN (EAN)	4050118072303	
Qty.	1 ST	

Type label holder



Integrate, expand and customise: The ideal expansion for every application

The consistent structure of accessories for the new Klippon® TB enclosure range means that you can easily adapt the enclosure to the specific requirements of each application.

Nameplate holders

There are a variety of designed label holders available for prominent display as required and for additional nameplates as needed.

General ordering data

Type	TPSDHA KTB 100X25 S2 2R	Version
Order No.	1257640000	Klippon TB (Terminal Box), Ratings plate holder, Riveted, Height: 25 mm, Width: 141 mm, Depth: 16.5 mm, Basic material: Stainless steel 1.4301, Stainless steel 1.4301 (304), Mirror polished, silver
GTIN (EAN)	4050118070354	
Qty.	1 ST	
Type	TPSDHA KTB 130X50 S2 R	Version
Order No.	1283450000	Klippon TB (Terminal Box), Ratings plate holder, Riveted, Height: 50 mm, Width: 171 mm, Depth: 16.5 mm, Basic material: Stainless steel 1.4301, Stainless steel 1.4301 (304), Mirror polished, silver
GTIN (EAN)	4050118073621	
Qty.	1 ST	
Type	TPSDHA KTB 70X70M3 S2 R	Version
Order No.	1279320000	Klippon TB (Terminal Box), Ratings plate holder, Riveted, Height: 70 mm, Width: 70 mm, Depth: 20 mm, Basic material: Stainless steel 1.4301, Stainless steel 1.4301 (304), Mirror polished, silver
GTIN (EAN)	4050118070101	
Qty.	1 ST	

Closure elements



Integrate, expand and customise: The ideal expansion for every application

The consistent structure of accessories for the new Klippon® TB enclosure range means that you can easily adapt the enclosure to the specific requirements of each application.

Sealing systems

There are different closure systems available for the safe and orderly sealing of the enclosure. There are padlocks for the Klippon® TB MH enclosures and a variety of lock inserts for the Klippon® TB QL enclosures.

General ordering data

Type	KTB QLH S4 SLS	Version
Order No.	1191610000	Klippon TB (Terminal Box), Closure element, Basic material: Stainless steel 1.4404, untreated, silver
GTIN (EAN)	4050118137965	
Qty.	50 ST	

KTB QL 987420 S4E1

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
 D-32758 Detmold
 Germany

www.weidmueller.com

Accessories

Type	KTB QLL S2 DB3	Version
Order No.	1191590000	Klippon TB (Terminal Box), Closure element, Basic material: Stainless
GTIN (EAN)	4050118134285	steel 1.4301, untreated, silver
Qty.	50 ST	
Type	KTB QLL S2 SLS	Version
Order No.	1191600000	Klippon TB (Terminal Box), Closure element, Basic material: Stainless
GTIN (EAN)	4050118137989	steel 1.4301, untreated, silver
Qty.	10 ST	

Installation material



Integrate, expand and customise - the perfect supplement to every application

The fully structured range of system accessories for the new Klippon® TB enclosure series allows you to easily adapt the enclosures to meet the specific requirements of every application.

Mounting hardware kits

Mounting hardware kits are available for quick and easy installation of type label holders, document holders and rain hoods.

The label fastening set – SD is required to install a plastic (Trafolyte) ID or type label. With the aid of this set can you mount the ID or type label directly on the enclosure cover. The label fastening set has been specially developed for this purpose. Only by using this fastening set can you ensure that there will be no leaks into the enclosure or damage to the label.

The universal fastening set – TPSD has been developed to enable secure and quick installation of type label holders, rain covers or document holders, for example. By using this fastening set, the risk of leaks can be minimised, if not avoided.

General ordering data

Type	SD FIXING SET	Version
Order No.	1285200000	Klippon TB (Terminal Box), Identification plate fixing set, Height: 12
GTIN (EAN)	4050118075472	mm, Width: 12 mm, Depth: 16.4 mm, Basic material: Stainless steel,
Qty.	1 ST	rust-proof, untreated, silver
Type	TPSD FIXING SET KTB	Version
Order No.	1252190000	Klippon TB (Terminal Box), Type plate fixings set, Basic material:
GTIN (EAN)	4050118043969	Stainless steel, rust-proof, untreated, silver
Qty.	20 ST	

KTB QL 987420 S4E1

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
 D-32758 Detmold
 Germany

Accessories

www.weidmueller.com

Document holders



Integrate, expand and customise - the perfect supplement to every application

The fully structured range of system accessories for the new Klippon® TB enclosure series allows you to easily adapt the enclosures to meet the specific requirements of every application.

Document holders

Document holders for the proper storage of documents in the enclosure

General ordering data

Type	DOHA KTB A6 S2 R	Version
Order No.	1252780000	Klippon TB (Terminal Box), Document holders, Riveted, Height: 110
GTIN (EAN)	4050118045512	mm, Width: 130 mm, Depth: 20 mm, Basic material: Stainless steel
Qty.	1 ST	1.4301, Stainless steel 1.4301 (304), Mirror polished, silver
Type	DOHA KTB A5 S2 R	Version
Order No.	1252750000	Klippon TB (Terminal Box), Document holders, Riveted, Height: 150
GTIN (EAN)	4050118045390	mm, Width: 180 mm, Depth: 20 mm, Basic material: Stainless steel
Qty.	1 ST	1.4301, Stainless steel 1.4301 (304), Mirror polished, silver
Type	DOHA KTB A4 S2 R	Version
Order No.	1252730000	Klippon TB (Terminal Box), Document holders, Riveted, Height: 200
GTIN (EAN)	4050118045383	mm, Width: 240 mm, Depth: 20 mm, Basic material: Stainless steel
Qty.	1 ST	1.4301, Stainless steel 1.4301 (304), Mirror polished, silver

Earthing stud



Integrate, expand and customise: The ideal expansion for every application

The consistent structure of accessories for the new Klippon® TB enclosure range means that you can easily adapt the enclosure to the specific requirements of each application.

Earthing bolt

Earthing bolts to exchange as a complete component in two versions – brass and stainless steel.

General ordering data

Type	PEBZ M10 KTB BR SET	Version
Order No.	1192680000	Klippon TB (Terminal Box), Earthing stud, Miscellaneous, Height: 21
GTIN (EAN)	4032248974641	mm, Width: 21 mm, Depth: 48.7 mm, Basic material: Brass,
Qty.	1 ST	untreated, silver
Type	PEBZ M10 KTB S4 SET	Version
Order No.	1192690000	Klippon TB (Terminal Box), Earthing stud, Miscellaneous, Height: 21
GTIN (EAN)	4032248974658	mm, Width: 21 mm, Depth: 48.7 mm, Basic material: Stainless steel
Qty.	1 ST	1.4404 (316L), untreated, silver

KTB QL 987420 S4E1

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
 D-32758 Detmold
 Germany

www.weidmueller.com

Accessories

Grounding strap

The fully structured range of system accessories for the new Klippon® TB enclosure series allows you to easily adapt the enclosures to meet the specific requirements of every application. The following options are available:

- Closure Elements
- Document holders
- Earthing stud
- Gland plates
- Installation material
- Mounting plates
- Rain hoods
- Spacer
- Terminal rails
- Type label holder

General ordering data

Type	PECD WIRE 6/200/D6 SET	Version
Order No.	2475490000	Klippon TB (Terminal Box), Grounding strap, Ssrewed, Basic material:
GTIN (EAN)	4050118487206	Steel, Green/yellow
Qty.	1 ST	

Stainless steel 1.4404 (316L)



Integrate, expand and customise: The ideal expansion for every application

The consistent structure of accessories for the new Klippon® TB enclosure range means that you can easily adapt the enclosure to the specific requirements of each application.

Rain Covers

The rain cover provides an ideal, additional level of protection for the enclosure if it is installed in unusual climatic zones with, for instance, very heavy rainfall or extreme levels of direct sunlight.

General ordering data

Type	KTB RNHD XX7420 S4E R	Version
Order No.	1314340000	Klippon TB (Terminal Box), Rain hood, Height: 55.9 mm, Width: 745
GTIN (EAN)	4050118117615	mm, Depth: 211.2 mm, Basic material: Stainless steel 1.4404 (316L),
Qty.	1 ST	electropolished, silver

Depth 7.5 mm



Integrate, expand and customise: The ideal expansion for every application

The consistent structure of accessories for the new Klippon® TB enclosure range means that you can easily adapt the enclosure to the specific requirements of each application.

Terminal rails

The mounting rails are available in two sizes for mounting DIN rails (e.g. electronics, terminals) components in the enclosures.

KTB QL 987420 S4E1

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
 D-32758 Detmold
 Germany

www.weidmueller.com

Accessories

General ordering data

Type	TS35X7.5 ST KTB9874 HOR	Version	
Order No.	8000006730	Rail, TS 35, TS 35 x 7.5, Width: 666 mm, without slot, Steel,	
GTIN (EAN)	4050118653038	galvanized, chromium-plated	
Qty.	20 ST		
Type	TS35X7.5 ST KTB9874 VER	Version	
Order No.	8000006719	Rail, TS 35, TS 35 x 7.5, Width: 912 mm, without slot, Steel,	
GTIN (EAN)	4050118652970	galvanized, chromium-plated	
Qty.	20 ST		

Mounting plates



Mounting plates, with and without hole patterns, for longitudinal and transverse mounting of DIN mounting rails or components directly onto the mounting plate.

General ordering data

Type	GFSC M5X10 TX20 SET	Version	
Order No.	1274150000	Klippon EB (Essential Box), Mounting screw, Height: 13.3 mm, Width:	
GTIN (EAN)	4050118063820	8.5 mm, Depth: 8.5 mm, Basic material: Steel, galvanized, galvanic	
Qty.	1 ST	zinc plated and passivated, silver	

Depth 15 mm



Integrate, expand and customise: The ideal expansion for every application

The consistent structure of accessories for the new Klippon® TB enclosure range means that you can easily adapt the enclosure to the specific requirements of each application.

Terminal rails

The mounting rails are available in two sizes for mounting DIN rails (e.g. electronics, terminals) components in the enclosures.

General ordering data

Type	TS35X15 ST KTB9874 HOR	Version	
Order No.	8000073136	Rail, TS 35, TS 35 x 15, Width: 666 mm, without slot, Steel, galvanic	
GTIN (EAN)	4064675340928	zinc plated and passivated	
Qty.	20 ST		
Type	TS35X15 ST KTB9874 HOR-C	Version	
Order No.	8000073137	Rail, TS 35, TS 35 x 15, Width: 666 mm, without slot, Steel, galvanic	
GTIN (EAN)	4064675340935	zinc plated and passivated	
Qty.	20 ST		
Type	TS35X15 ST KTB9874 VER	Version	
Order No.	8000073138	Rail, TS 35, TS 35 x 15, Width: 912 mm, without slot, Steel, galvanic	
GTIN (EAN)	4064675340942	zinc plated and passivated	
Qty.	20 ST		

KTB QL 987420 S4E1

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
 D-32758 Detmold
 Germany

www.weidmueller.com

Accessories

Type	TS35X15 ST KTB9874 VER-C	Version	
Order No.	8000073139		Rail, TS 35, TS 35 x 15, Width: 912 mm, without slot, Steel, galvanic
GTIN (EAN)	4064675340959		zinc plated and passivated
Qty.	20 ST		

Installation material



Integrate, expand and customise - the perfect supplement to every application

The fully structured range of system accessories for the new Klippon® TB enclosure series allows you to easily adapt the enclosures to meet the specific requirements of every application.

Mounting hardware kits

Mounting hardware kits are available for quick and easy installation of type label holders, document holders and rain hoods.

The label fastening set – SD is required to install a plastic (Trafolyte) ID or type label. With the aid of this set can you mount the ID or type label directly on the enclosure cover. The label fastening set has been specially developed for this purpose. Only by using this fastening set can you ensure that there will be no leaks into the enclosure or damage to the label.

The universal fastening set – TPSD has been developed to enable secure and quick installation of type label holders, rain covers or document holders, for example. By using this fastening set, the risk of leaks can be minimised, if not avoided.

General ordering data

Type	FKSC M6X8 D9/SW3	Version	
Order No.	0642600000		Klippon TB (Terminal Box), Mounting screw, Basic material: Steel
GTIN (EAN)	4008190058258		
Qty.	50 ST		