

UK Venues

Lit Displayed, central-limit order books

MIC	Operating MIC	Description
AIMX	XLON	LONDON STOCK EXCHANGE - AIM MTF
AQXE	AQXE	AQUIS EXCHANGE
BATE	BCXE	CBOE Europe - BXE Order Books
CHIX	BCXE	CBOE Europe - CXE Order Books
TRQX	TRQX	TURQUOISE
XLOM	XLON	LONDON STOCK EXCHANGE - MTF
XLON	XLON	LONDON STOCK EXCHANGE

Auction Opening, Closing or Intraday auctions on displayed

MIC	Operating MIC	Description
AIMX-AUC*	XLON	LONDON STOCK EXCHANGE - AIM MTF
XLOM-AUC*	XLON	LONDON STOCK EXCHANGE - MTF
XLON-AUC*	XLON	LONDON STOCK EXCHANGE

Bank SI Bank/Broker Operated Systematic Internalisers

MIC	Operating MIC	Description
BCSI	BCSL	BARCLAYS CAPITAL SECURITIES LIMITED - SYSTEMATIC INTERNALISER
CSSI	CSIN	CREDIT SUISSE INTERNATIONAL - SYSTEMATIC INTERNALISER
MLSI	MLIX	MERRILL LYNCH INTERNATIONAL - SYSTEMATIC INTERNALISER
SICS	CSEU	CREDIT SUISSE SECURITIES (EUROPE) LIMITED - SYSTEMATIC INTERNALISER
UBSY	UBSB	UBS AG LONDON BRANCH - SYSTEMATIC INTERNALISER

ELP SI Electronic Market Maker SIs

MIC	Operating MIC	Description
CCEU	CCEU	CITADEL CONNECT EUROPE - SYSTEMATIC INTERNALISER
HRSI	HRSI	HUDSON RIVER TRADING - SYSTEMATIC INTERNALISER
JSSI	JSSI	JANE STREET FINANCIAL LTD - SYSTEMATIC INTERNALISER
TRSI	TRSI	TOWER RESEARCH CAPITAL EUROPE LTD
XTXM	XTXM	XTX MARKETS

Dark Non-displayed liquidity

MIC	Operating MIC	Description
AQXD	AQXE	AQUIS EXCHANGE PLC AMP NON DISPLAY ORDER BOOK
BATD	BCXE	CBOE Europe - BXE Dark Order Books
BLOX	XIEL	BLOCKMATCH
CHID	BCXE	CBOE Europe - CXE Dark Order Books
CSEU	CSEU	CREDIT SUISSE (EUROPE)

UK Venues

Dark

Non-displayed liquidity

MIC	Operating MIC	Description
LIQU	LIQU	LIQUIDNET SYSTEMS
SGMX	SGMX	SIGMA X MTF
TRQM	TRQX	TURQUOISE DARK
XPOL	VIUK	POSIT DARK UK
XUBS	XUBS	UBS MTF

Grey

Non-Displayed orders on displayed order books

MIC	Operating MIC	Description
CHIX-MID*	BCXE	CBOE EUROPE – CXE HIDDEN MIDPOINT
XLON-MID*	XLON	London Stock Exchange - Hidden Midpoint

Periodic Auction

Frequent batch auction venues

MIC	Operating MIC	Description
AQXA	AQXE	AQUIS AUCTION ON DEMAND (AOD)
BATP	BCXE	CBOE Europe - BXE Periodic Auctions
SGMY	SGMX	SIGMA X MTF - AUCTION BOOK
TRQA	TRQX	TURQUOISE LIT AUCTIONS
XUMP	XUBS	UBS MTF - PERIODIC AUCTION

Conditional

Pools supporting conditional indications

MIC	Operating MIC	Description
LIQU-CON*	LIQU	LIQUIDNET SYSTEMS
LISX	BCXE	CBOE Europe - LIS Service
TRQM-BDS*	TRQX	TURQUOISE PLATO
XPOL-CON*	VIUK	POSIT DARK
XSMP	XLDN	SMARTPOOL

EMEA ex. UK Venues

Lit		Displayed, central-limit order books
MIC	Operating MIC	Description
ALXP	XPAR	EURONEXT - ALTERNEXT PARIS
AQEU	AQEU	AQUIS EXCHANGE EUROPE
ASEX	ASEX	ATHENS STOCK EXCHANGE
CEUX	CCXE	CBOE EUROPE - DXE ORDER BOOKS (NL)
FNDK	XCSE	FIRST NORTH DENMARK
FNFI	XHEL	FIRST NORTH FINLAND
FNSE	XSTO	FIRST NORTH SWEDEN
HAMB	XHAM	BOERSE HAMBURG - FREIVERKEHR
HANA	XHAN	BOERSE HANNOVER - REGULIERTER MARKT
MTAA	XMIL	BORSA ITALIANA - ELECTRONIC SHARE MARKET
ONSE	XSTO	FIRST NORTH SWEDEN - NORWAY
SSME	XSTO	FIRST NORTH SWEDEN - SME GROWTH MARKET
TQEX	TQEX	TURQUOISE EUROPE
WBAH	XWBO	WIENER BOERSE AG AMTLICHER HANDEL (OFFICIAL MARKET)
XAIM	XMIL	AIM ITALIA - MERCATO ALTERNATIVO DEL CAPITALE
XAMS	XAMS	EURONEXT - EURONEXT AMSTERDAM
XATH	ASEX	ATHENS EXCHANGE S.A. CASH MARKET
XBRU	XBRU	EURONEXT - EURONEXT BRUSSELS
XBUD	XBUD	BUDAPEST STOCK EXCHANGE
XCSE	XCSE	NASDAQ COPENHAGEN A/S
XDUB	XDUB	IRISH STOCK EXCHANGE - ALL MARKET
XEQT	XBER	BOERSE BERLIN EQUIDUCT TRADING
XESM	XDUB	IRISH STOCK EXCHANGE - ENTREPRISE SECURITIES MARKET
XETA	XETR	XETRA - REGULIERTER MARKT
XETB	XETR	XETRA - FREIVERKEHR
XETR	XETR	XETRA
XETS	XETR	XETRA - SCALE
XFRA	XFRA	DEUTSCHE BOERSE AG
XHEL	XHEL	NASDAQ HELSINKI LTD
XIST	XIST	BORSA ISTANBUL
XJSE	XJSE	JOHANNESBURG STOCK EXCHANGE
XLIS	XLIS	EURONEXT - EURONEXT LISBON
XMAD	BMEX	BOLSA DE MADRID
XMCE	BMEX	MERCADO CONTINUO ESPANOL - CONTINUOUS MARKET
XMIL	XMIL	BORSA ITALIANA S.P.A.
XMSM	XDUB	DUBLIN - IRISH STOCK EXCHANGE - MAIN SECURITIES MARKET (MSM)- ISE XETRA
XNGM	XNGM	NORDIC GROWTH MARKET
XOSL	XOSL	OSLO BORS ASA
XPAR	XPAR	EURONEXT - EURONEXT PARIS
XPRA	XPRA	PRAGUE STOCK EXCHANGE
XSTO	XSTO	NASDAQ STOCKHOLM AB

EMEA ex. UK Venues

Lit Displayed, central-limit order books

MIC	Operating MIC	Description
XSWX	XSWX	SIX SWISS EXCHANGE
XTAE	XTAE	TEL AVIV STOCK EXCHANGE
XVIE	XWBO	WIENER BOERSE AG, WERTPAPIERBOERSE (SECURITIES EXCHANGE)
XWAR	XWAR	WARSAW STOCK EXCHANGE/EQUITIES/MAIN MARKET
XWBO	XWBO	WIENER BOERSE AG

Auction Opening, Closing or Intraday auctions on displayed

MIC	Operating MIC	Description
ASEX-AUC*	ASEX	ATHENS STOCK EXCHANGE
MTAA-AUC*	XMIL	ELECTRONIC SHARE MARKET
WBAH-AUC*	XWBO	WIENER BOERSE AG AMTLICHER HANDEL (OFFICIAL MARKET)
XAIM-AUC*	XMIL	AIM ITALIA - MERCATO ALTERNATIVO DEL CAPITALE
XAMS-AUC*	XAMS	EURONEXT - EURONEXT AMSTERDAM
XATH-AUC*	ASEX	ATHENS EXCHANGE S.A. CASH MARKET
XBUD-AUC*	XBUD	BUDAPEST STOCK EXCHANGE
XCSE-AUC*	XCSE	NASDAQ COPENHAGEN A/S
XDUB-AUC*	XDUB	IRISH STOCK EXCHANGE - ALL MARKET
XETA-AUC*	XETR	XETRA - REGULIERTER MARKT
XETR-AUC*	XETR	XETRA
XFRA-AUC*	XFRA	DEUTSCHE BOERSE AG
XHEL-AUC*	XHEL	NASDAQ HELSINKI LTD - Auction
XIST-AUC*	XIST	BORSA ISTANBUL
XJSE-AUC*	XJSE	JOHANNESBURG STOCK EXCHANGE
XLIS-AUC*	XLIS	EURONEXT - EURONEXT LISBON
XMAD-AUC*	BMEX	BOLSA DE MADRID
XMIL-AUC*	XMIL	BORSA ITALIANA S.P.A.
XOSL-AUC*	XOSL	OSLO BORS
XPAR-AUC*	XPAR	EURONEXT - EURONEXT PARIS
XPRA-AUC*	XPRA	PRAGUE STOCK EXCHANGE
XSTO-AUC*	XSTO	NASDAQ STOCKHOLM AB
XSWX-AUC*	XSWX	SIX SWISS EXCHANGE
XTAE-AUC*	XTAE	TEL AVIV STOCK EXCHANGE
XVIE-AUC*	XWBO	WIENER BOERSE AG, WERTPAPIERBOERSE (SECURITIES EXCHANGE)
XWAR-AUC*	XWAR	WARSAW STOCK EXCHANGE/EQUITIES/MAIN MARKET
XWBO-AUC*	XWBO	WIENER BOERSE AG

Bank SI Bank/Broker Operated Systematic Internalisers

MIC	Operating MIC	Description
BBIS	BBIE	BARCLAYS BANK IRELAND PLC - SYSTEMATIC INTERNALISER
JPEU	JPEU	J.P. MORGAN AG - SYSTEMATIC INTERNALISER

EMEA ex. UK Venues

Bank SI

Bank/Broker Operated Systematic Internalisers

MIC	Operating MIC	Description
MLES	MLEX	BOFA SECURITIES EUROPE - SYSTEMATIC INTERNALISER
UBSI	UBSL	UBS LIMITED EMEA TRADING - SYSTEMATIC INTERNALISER

ELP SI

Electronic Market Maker SIs

MIC	Operating MIC	Description
EQTA-OPT*	XBER	BOERSE BERLIN EQUIDUCT TRADING - REGULIERTER MARKT
EQTB-OPT*	XBER	BOERSE BERLIN EQUIDUCT TRADING - BERLIN SECOND REGULATED MARKET
EQTC-OPT*	XBER	BOERSE BERLIN EQUIDUCT TRADING - FREIVERKEHR
EUCC	EUCC	CITADEL CONNECT EUROPE - EU - SYSTEMATIC INTERNALISER
HREU	HREU	HRTEU LIMITED - SYSTEMATIC INTERNALISER
TOWR	TOWR	TOWER RESEARCH CAPITAL EUROPE - SYSTEMATIC INTERNALISER
XTXE	XTXE	XTX MARKETS SAS

Dark

Non-displayed liquidity

MIC	Operating MIC	Description
AQED	AQEU	AQUIS EXCHANGE EUROPE NON DISPLAY ORDER BOOK (NDOB)
CEUD	CCXE	CBOE EUROPE - DXE DARK ORDER BOOK (NL)
DCSE	XCSE	NASDAQ COPENHAGEN A/S - NORDIC@MID
DHEL	XHEL	NASDAQ HELSINKI LTD - NORDIC@MID
DNDK	XCSE	FIRST NORTH DENMARK - NORDIC@MID
DNFI	XHEL	FIRST NORTH FINLAND - NORDIC@MID
DNSE	XSTO	FIRST NORTH SWEDEN - NORDIC@MID
DSTO	XSTO	NASDAQ STOCKHOLM AB - NORDIC@MID
EBLX	XIGG	BLOCKMATCH EUROPE DARK
LEUE	LEUE	LIQUIDNET EU LIMITED EQUITY MTF
SGMU	SGMU	SIGMA X EUROPE NON-DISPLAYED BOOK
TQEM	TQEX	TURQUOISE EUROPE - DARK
XIGG	XIGG	BLOCKMATCH EUROPE
XPOS	ITGL	POSIT
XSWM	XSWX	SIX SWISS EXCHANGE - SIX SWISS EXCHANGE AT MIDPOINT

Grey

Non-Displayed orders on displayed order books

MIC	Operating MIC	Description
CEUX-MID*	CCXE	CEUX - Midpoint
XCSE-MID*	XCSE	NASDAQ COPENHAGEN A/S - NORDIC@MID
XHEL-MID*	XHEL	NASDAQ HELSINKI LTD - NORDIC@MID
XSTO-MID*	XSTO	NASDAQ STOCKHOLM AB - NORDIC@MID

Periodic Auction

Frequent batch auction venues

MIC	Operating MIC	Description
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EMEA ex. UK Venues

Periodic Auction

Frequent batch auction venues

MIC	Operating MIC	Description
AQEA	AQEU	AQUIS EXCHANGE EUROPE AUCTION ON DEMAND (AOD)
BEUP	CCXE	CBOE EUROPE - DXE PERIODIC (NL)
MCSE	XCSE	NASDAQ COPENHAGEN A/S AUCTION ON DEMAND
MHEL	XHEL	NASDAQ HELSINKI LTD " AUCTION ON DEMAND
MNDK	XCSE	FIRST NORTH DENMARK - AUCTION ON DEMAND
MNFI	XHEL	FIRST NORTH FINLAND - AUCTION ON DEMAND
MNSE	XSTO	FIRST NORTH SWEDEN " AUCTION ON DEMAND
MSTO	XSTO	NASDAQ STOCKHOLM AB " AUCTION ON DEMAND
SGMV	SGMU	SIGMA X EUROPE AUCTION BOOK
TQEA	TQEX	TURQUOISE EUROPE - LIT AUCTIONS
XPAC	ITGL	POSIT AUCTION
XPAL	VIUK	Posit Auction UK

Conditional

Pools supporting conditional indications

MIC	Operating MIC	Description
LEUE-CON*	LEUE	LIQUIDNET SYSTEMS (EUROPE)
LISZ	CCXE	CBOE EUROPE - LIS SERVICE (NL)
TQEM-BDS*	TQEX	TURQUOISE PLATO (EUROPE)
XPOS-CON*	ITGL	POSIT DARK

Off-Book

Off-Book Trading

MIC	Operating MIC	Description
BATF	BCXE	CBOE Europe - BXE Off-Book
CEUO	CCXE	CBOE EUROPE - DXE OFF-BOOK (NL)
EQTA	XBER	BOERSE BERLIN EQUIDUCT TRADING - REGULIERTER MARKT
EQTB	XBER	BOERSE BERLIN EQUIDUCT TRADING - BERLIN SECOND REGULATED MARKET
EQTC	XBER	BOERSE BERLIN EQUIDUCT TRADING - FREIVERKEHR

North America Venues

Lit

Displayed, central-limit order books

MIC	Operating MIC	Description
ARCX	XNYS	NYSE ARCA
BATS	XCBO	BATS Z-EXCHANGE
BATY	XCBO	BATS Y - EXCHANGE, INC.
CBSX	XCBO	CBOE STOCK EXCHANGE
CHIC	CHIC	CHI-X CANADA ATS
EDGA	XCBO	EDGA EXCHANGE
EDGX	XCBO	EDGX EXCHANGE
EPRL	MIHI	MIAX PEARL EQUITIES
GLPX	GLPX	ACS EXECUTION SERVICES, LLC
IEXG	IEXG	INVESTORS EXCHANGE
MEMX	MEMX	MEMX LLC
MPRL	MIHI	MIAX PEARL, LLC
NEOE	NEOE	NEO EXCHANGE
OMGA	OMGA	OMEGA ATS
PURE	XCNQ	PURE TRADING
XASE	XNYS	NYSE MKT LLC
XATS	XATS	ALPHA EXCHANGE
XBOS	XNAS	NASDAQ OMX BX
XCHI	XNYS	CHICAGO STOCK EXCHANGE, INC
XCIS	XNYS	NATIONAL STOCK EXCHANGE, INC.
XCNQ	XCNQ	CANADIAN NATIONAL STOCK EXCHANGE
XCX2	CHIC	CX2
XCXD	XCXD	NASDAQ CXD
XNAS	XNAS	NASDAQ - ALL MARKETS
XNGS	XNAS	NASDAQ/NGS (GLOBAL SELECT MARKET)
XNMS	XNAS	NASDAQ/NMS (GLOBAL MARKET)
XNYS	XNYS	NEW YORK STOCK EXCHANGE, INC.
XPHL	XNAS	NASDAQ OMX PHLX
XPSX	XNAS	NASDAQ OMX PSX
XTSE	XTSE	TORONTO STOCK EXCHANGE

ELP SI

Electronic Market Maker SIs

MIC	Operating MIC	Description
CDED	CDED	CITADEL SECURITIES
HRTF	HRTF	HUDSON RIVER TRADING (HRT)
JSES	JSES	JANE STREET EXECUTION SERVICES LLC
JSJX	JSJX	JANE STREET JX
XTXD	XTXD	XTX DIRECT

North America Venues

Dark

Non-displayed liquidity

MIC	Operating MIC	Description
ASPN	INCR	INTELLIGENTCROSS ASPEN INTELLIGENT BID/OFFER
BAML	BAML	BANK OF AMERICA - MERRILL LYNCH INSTINCT X ATS
BARX	BARX	BARCLAYS ATS
BNPC	BNPC	BNPP CORTEX ATS
CAES	CRED	CREDIT SUISSE AES CROSSFINDER
CICX	CGMI	CITI CROSS
CODA	CODA	CODA MARKETS - MICRO AND BLOCK
CPGX	CPGX	CLEARPOOL EXECUTION SERVICES, LLC
DBSX	DBSX	DEUTSCHE BANK SUPER X
ICBX	XINS	INSTINET CBX (US)
IMCS	IMCS	IMC FINANCIAL MARKETS
INCR	INCR	INTELLIGENTCROSS
ITGI	ITGI	ITG - POSIT
JPBX	JPBX	JPBX
JPMX	JPMX	JPMX
KNLI	KNIG	KNIGHT LINK
LEVL	LEVL	LEVEL ATS
MLVX	BAML	BANK OF AMERICA - MERRILL LYNCH VWAP CROSS
MSPL	MSCO	MS POOL
NMRA	NMRA	NOMURA SECURITIES INTERNATIONAL
PDQX	PDQX	PDQ ATS
SGMA	SGMA	GOLDMAN SACHS
SGMT	GSCO	SIGMA X2
SOHO	SOHO	TWO SIGMA SECURITIES, LLC
UBSA	UBSA	UBS ATS
VFMI	VUSA	VIRTUE MATCHITATS
XSTM	NFSC	FIDELITY CROSSSTREAM ATS

Grey

Non-Displayed orders on displayed order books

MIC	Operating MIC	Description
ARCD	XNYS	ARCA DARK
BATS-GRY*	XCBO	BATS/DARKAGG
BOSD	XNAS	NASDAQ OMX BX DARK
BYXD	XCBO	BATS Y-EXCHANGE DARK
BZXD	XCBO	BATS Z - EXCHANGE DARK
EDDP	XCBO	EDGX EXCHANGE DARK
EDGD	XCBO	EDGA EXCHANGE DARK
IEXD	IEXG	INVESTORS EXCHANGE - DARK
IEXG-GRY*	IEXG	INVESTORS EXCHANGE
MELO	XNAS	NASDAQ MIDPOINT-ELO (M-ELO)
NASD	XNAS	NSDQ DARK

North America Venues

Grey

Non-Displayed orders on displayed order books

MIC	Operating MIC	Description
NYSE	XNYS	NYSE DARK
XNAS-GRY*	XNAS	XNAS/DARKAGG
XNYS-GRY*	XNYS	XNYS/DARKAGG

Conditional

Pools supporting conditional indications

MIC	Operating MIC	Description
AQUA	AQUA	AQUA EQUITIES L.P.
BIDS	BIDS	BIDS TRADING L.P.
BLKX	XINS	INSTINET BLOCKCROSS
CBLC	CGMI	CITIBLOC
ITGI-CON*	ITGI	ITG - POSIT
LIUH	LIUS	LIQUIDNET, INC. H2O ATS

Off-Book

Off-Book Trading

MIC	Operating MIC	Description
EBXV	LEVL	LEVEL ATS - VWAP CROSS
MLCO	BAML	BANK OF AMERICA - MERRILL LYNCH OTC
OTCN	OTCN	OTC LINK ECN
XOTC	XOTC	OTCBB

Venues marked with a '*' are not official ISO venues, these codes are unique to Redburn and are used to differentiate different flow types within post-trade reports. These will not be returned as execution venues via FIX.

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