

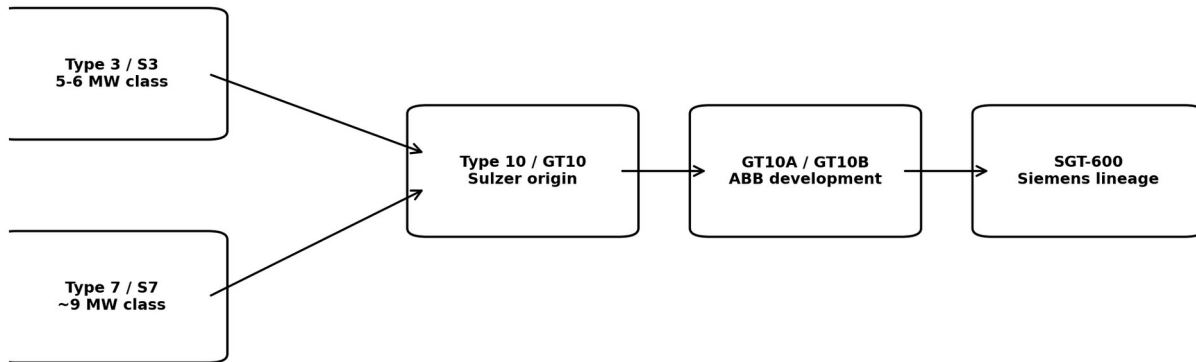
PETRO MADAR ARIYA

SULZER GAS TURBINE

IGNITION EXCITER CATALOGUE

Type 3 / S3 | Type 7 / S7 | Type 10 / GT10 | GT10A | GT10B | SGT-600

Sulzer-Origin Industrial Gas Turbine Lineage



GT11 / GT13 / GT24 / GT26 and GT35 / SGT-500 are excluded from Sulzer-origin scope.

Document No.	PMA-CAT-SUL-EXC-001
Revision	01 - Expanded Research Catalogue
Issue Date	05 August 2026
Language	English
Control Status	Engineering Reference - TBC items clearly identified

1. Executive Summary

The defensible Sulzer-origin industrial gas-turbine scope comprises three principal historical lines: Type 3/S3, Type 7/S7, and Type 10/GT10. The Type 10 line was subsequently developed as GT10A and GT10B and later continued under Siemens as SGT-600. Machines such as GT11, GT13, GT24, GT26 and GT35/SGT-500 are excluded because their design lineage is BBC/ABB/Alstom or Stal-Laval rather than Sulzer Type 10.

Two ignition families are commercially traceable. The first is a Sulzer legacy two-channel ignition transformer identified as OEM P/N 00000-4582122 and Type/Alt P/N AGC 093032-10, with observed 230 VAC, 50/60 Hz marking and candidate igniter P/N 00000-4582145. The exact turbine-model allocation remains TBC. The second is the GT10B/SGT-600 torch-igniter system MBT10AV005, whose exciter tag T01 powers spark plug E01. The strongest candidate component set is 2404819-1 / Champion 305076 exciter, 2404822-1 / Champion 53234 lead and 2404045-1 / Champion FHE246-4 igniter.

No unknown electrical values have been inferred. Every unverified field is marked TBC, Probable/TBC or Engineering Hold.

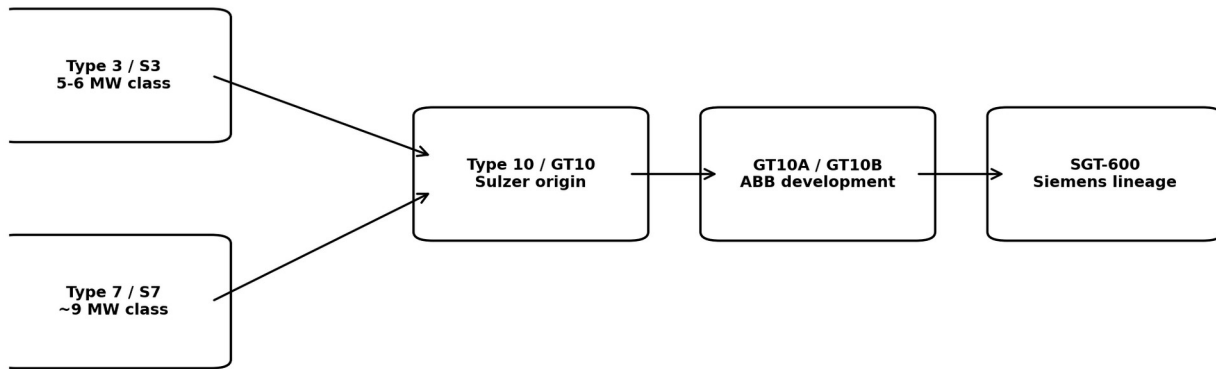
2. Evidence Classification

Grade	Definition	Permitted Use	Catalogue Mark
A	Official OEM, original manufacturer or peer-reviewed historical publication.	Model lineage and exact cross-reference where explicitly stated.	Verified
B	OEM training manual, authoritative specialist document or matching industrial cross-reference.	System architecture and candidate component mapping.	Probable / TBC
C	Aftermarket supplier, stock listing or commercial photograph.	Research support only.	Candidate
X	Conflicting suffix, revision or model allocation.	Do not release.	Engineering Hold

3. Sulzer-Origin Model Coverage

Model	Configuration	Approx. Class	Ignition Evidence	Exciter P/N Status	Catalogue Decision
Type 3	Single-shaft	5.35-6.2 MW	Two electric ignitors documented	TBC	Architecture recorded; BOM held
S3	Split-shaft	5.35-6.2 MW	Two electric ignitors documented	TBC	Architecture recorded; BOM held
Type 7	Single-shaft	~9 MW	Model verified; ignition BOM unavailable	TBC	Model index only
S7	Split-shaft	~9 MW	Model verified; ignition BOM unavailable	TBC	Legacy exciter 00000-4582122 only as candidate
Type 10 / GT10	Industrial	~22 MW original line	Lineage verified	TBC	No GT10B values inherited automatically
GT10A	Industrial	Development variant	Combustor/DLE effectivity matters	TBC	Serial-specific verification
GT10B	Industrial	24.5 MW class	MBT10AV005; T01 exciter; E01 spark plug	2404819-1 candidate	Primary product family
SGT-600	Industrial	Current evolved line	GT10B-derived architecture	Fleet/serial-specific	Siemens BOM takes precedence

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4. Master Ignition Cross-Reference

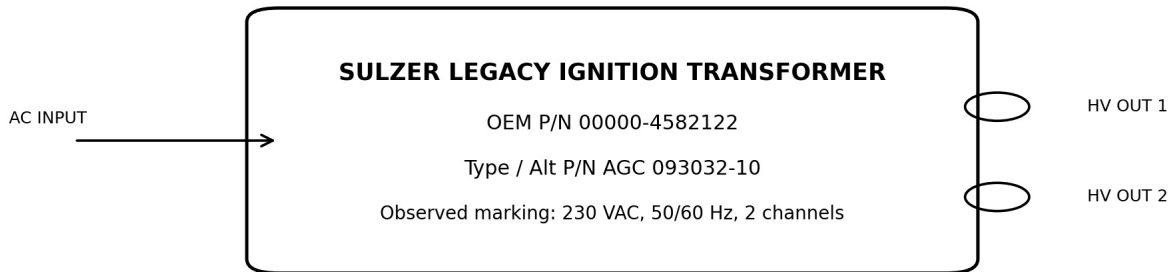
Platform	Exciter OEM P/N	Alt / Manufacturer P/N	Lead P/N	Igniter P/N	Channels	Electrical Data	Status
Type 3 / S3	TBC	TBC	TBC	TBC	Two ignitors; common vs separate exciter TBC	TBC	Architecture Verified
Type 7 / S7	00000-4582122 candidate	AGC 093032-10	TBC	00000-4582145 candidate	2	230 VAC, 50/60 Hz observed	Candidate / model TBC
Type 10 / GT10	TBC	TBC	TBC	TBC	TBC	TBC	Engineering Hold
GT10A	TBC	TBC	TBC	TBC	TBC	TBC	Engineering Hold
GT10B	2404819-1 candidate	Champion 305076	2404822-1 / Champion 53234	2404045-1 / Champion FHE246- 4	1 inferred	Input, joules, rate and duty TBC	Probable / TBC
SGT-600	2404819-1 candidate	Champion 305076	2404822-1 / Champion 53234	2404045-1 / Champion FHE246- 4	1 inferred	Revision and ratings serial- specific	Probable / TBC
Sulzer legacy - model unresolved	00000-4582122	AGC 093032-10 / PD-HV-40066	TBC	00000-4582145 / 20.10.51.305.3	2	230 VAC, 50/60 Hz observed	P/N supplier- verified; model TBC

5. Product Reference Sheet PR-01

PMA-EXC-SUL-LEG-4582122-TRF-2C-230A-TBC

Sulzer Legacy Two-Channel Ignition Transformer

PMA Technical Illustration - Not an OEM Drawing



Pulse energy, output voltage, spark rate, duty cycle, IP/Ex and temperature range remain TBC.

Parameter	Controlled Reference
OEM P/N	00000-4582122
Type / Alt P/N	AGC 093032-10
Known supplier references	PD-HV-40066 / PD-HV-4006 variation; model allocation unresolved
Observed supply marking	230 VAC, 50/60 Hz
Outputs	Two high-voltage channels
Candidate associated igniter	OEM P/N 00000-4582145; alternate 20.10.51.305.3
Pulse energy / peak voltage / spark rate	TBC
Duty cycle / input current	TBC
Environmental and hazardous-area rating	TBC
Required release evidence	Original nameplate, installation model, wiring, connector schedule and bench-test report

6. Product Reference Sheet PR-02

PMA-EXC-SUL-GT10B-2404819-1-CD-1C-TBC

GT10B / SGT-600 Torch-Igniter Exciter Candidate

GT10B / SGT-600 Ignition Chain - Engineering Candidate Set



System tag: MBT10AV005 | Exciter tag: T01 | Spark plug tag: E01

Part-number assignment remains Probable/TBC until confirmed by the unit System List or direct nameplate evidence.

Parameter	Controlled Reference
Platform	GT10B and legacy SGT-600 configuration
Ignition system tag	MBT10AV005
Exciter tag	T01
Spark plug tag	E01
Exciter candidate OEM P/N	2404819-1
Exciter manufacturer cross-reference	Champion Aerospace 305076
Ignition lead candidate	2404822-1 / Champion 53234
Igniter plug candidate	2404045-1 / Champion FHE246-4
Architecture	T01 supplies E01 to light a torch/pilot igniter, which initiates main combustor flame
Input supply / output energy / spark rate / duty	TBC
Status	Probable/TBC pending controlled System List or direct nameplate

Critical caution: 24 VDC references in GT10B auxiliary-system documents relate to valve solenoids and emergency-control functions. They do not prove the input voltage of exciter T01.

7. PMA Product Numbering

PMA-EXC-SUL-[PLATFORM]-[OEMKEY]-[TECH]-[CHANNEL]-[SUPPLY]-[STATUS]

Segment	Meaning	Examples
PMA	Petro Madar Ariya	PMA
EXC	Ignition exciter / transformer	EXC
SUL	Sulzer-origin platform	SUL
PLATFORM	T3, S3, T7, S7, GT10, GT10A, GT10B, SGT600, LEG	GT10B
OEMKEY	Verified or candidate OEM identifier	4582122, 2404819-1
TECH	TRF transformer, CD capacitor-discharge, UNK unknown	TRF
CHANNEL	1C, 2C, UC	2C
SUPPLY	230A, 24D, TBC	230A
STATUS	VER, TBC, X, RF	TBC

8. Engineering Verification and Retrofit Strategy

- Confirm complete exciter and turbine nameplates, including all suffixes and revisions.
- Obtain the applicable System List, Electrical Consumer List, wiring diagram and package serial effectivity.
- Measure pulse energy, open-circuit voltage, waveform under dummy load, cold/hot spark rate and inrush current.
- Determine whether dual channels operate simultaneously or sequentially and whether outputs share a return.
- Verify ignition-lead impedance, insulation rating, connector geometry and installed length.
- Confirm igniter thread, reach, electrode geometry and acceptable energy window.
- For obsolete systems, engineer and validate the full kit: exciter + lead + igniter, rather than changing only the exciter.

9. Excluded and Unresolved Models

Designation	Reason	Treatment
GT11 / GT13	BBC/ABB/Alstom large-frame lineage, not Sulzer Type 10.	Separate catalogue
GT24 / GT26	ABB/Alstom sequential-combustion lineage.	Separate catalogue
GT35 / SGT-500	Stal-Laval lineage.	Separate catalogue
GT48	No authoritative Sulzer gas-turbine model identity authenticated.	TBC - unresolved designation

10. Source Register

Ref	Source	Primary Use	Evidence Grade
S1	ASME paper: Type 3 - Sulzer's New 5 MWe Gas Turbine	Type 3/S3 model and two-electric-ignitor architecture	A
S2	ASME paper: Packaging of Gas Turbines Type 7 and Type S7	Type 7/S7 identity and class	A
S3	ABB/OSTI historical GT10 development literature	Sulzer Type 10 transfer and GT10 development	A
S4	Siemens Energy SGT-600 product information	Current SGT-600 lineage and platform status	A
S5	Siemens/GT10B basic-training material	MBT10AV005, T01, E01 and torch-igniter architecture	B
S6	Champion Aerospace Industrial Parts catalogue	2404819-1 / 305076; 2404822-1 / 53234; 2404045-1 / FHE246-4 cross-references	A
S7	Sulzer gas-turbine parts and service pages	Clarifies modern multi-OEM service activity	A
S8	Independent Sulzer parts suppliers and product photographs	00000-4582122, AGC 093032-10 and 00000-4582145 candidate data	C
S9	Unison ignition product information	General industrial exciter capability; no exact Sulzer P/N established	A

11. Corporate Contact

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